

March 26, 2018

NewFields Environmental 115 2nd Ave N. Suite 100 Edmonds. WA 98020 ALS Environmental
ALS Group USA, Corp
1317 South 13th Avenue
Kelso, WA 98626

T:+1 360 577 7222

F:+1 360 636 1068 www.alsglobal.com

Analytical Report for Service Request No: K1802038

RE: Yosemite Slough - San Francisco Bay

Dear Will,

Will Hafner

Enclosed are the results of the sample(s) submitted to our laboratory March 06, 2018 For your reference, these analyses have been assigned our service request number **K1802038**.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsqlobal.com.

Respectfully submitted,

noe D. Dan

ALS Group USA, Corp. dba ALS Environmental

Mark Harris

Project Manager



ALS Environmental ALS Group USA, Corp 1317 South 13th Avenue Kelso, WA 98626

T: +1 360 577 7222 F: +1 360 636 1068 www.alsglobal.com

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General Chemistry

Acronyms

ASTM American Society for Testing and Materials

A2LA American Association for Laboratory Accreditation

CARB California Air Resources Board

CAS Number Chemical Abstract Service registry Number

CFC Chlorofluorocarbon
CFU Colony-Forming Unit

DEC Department of Environmental Conservation

DEQ Department of Environmental Quality

DHS Department of Health Services

DOE Department of Ecology
DOH Department of Health

EPA U. S. Environmental Protection Agency

ELAP Environmental Laboratory Accreditation Program

GC Gas Chromatography

GC/MS Gas Chromatography/Mass Spectrometry

LOD Limit of Detection
LOQ Limit of Quantitation

LUFT Leaking Underground Fuel Tank

M Modified

MCL Maximum Contaminant Level is the highest permissible concentration of a substance

allowed in drinking water as established by the USEPA.

MDL Method Detection Limit
MPN Most Probable Number
MRL Method Reporting Limit

NA Not Applicable
NC Not Calculated

NCASI National Council of the Paper Industry for Air and Stream Improvement

ND Not Detected

NIOSH National Institute for Occupational Safety and Health

PQL Practical Quantitation Limit

RCRA Resource Conservation and Recovery Act

SIM Selected Ion Monitoring

TPH Total Petroleum Hydrocarbons

tr Trace level is the concentration of an analyte that is less than the PQL but greater than or

equal to the MDL.

Inorganic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated value.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
 DOD-QSM 4.2 definition: Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.
- H The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

- # The control limit criteria is not applicable. See case narrative.
- J The result is an estimated value.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. DOD-QSM 4.2 definition: Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.
- Q See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimated value.
- J The result is an estimated value.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
 DOD-QSM 4.2 definition: Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-	
North Carolina DEQ	certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water-	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.



Case Narrative

ALS Environmental—Kelso Laboratory 1317 South 13th Avenue, Kelso, WA 98626 Phone (360)577-7222 Fax (360)636-1068 www.alsglobal.com



Client:NewFields EnvironmentalService Request: K1802038Project:Yosemite Slough - San Francisco BayDate Received: 03/06/2018

Sample Matrix: Water

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt:

One water sample was received for analysis at ALS Environmental on 03/06/2018. The sample was received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

General Chemistry:

No significant anomalies were noted with this analysis.

	noe D. Oax	
Approved by		

Date 03/26/2018



Chain of Custody

ALS Environmental—Kelso Laboratory 1317 South 13th Avenue, Kelso, WA 98626 Phone (360)577-7222 Fax (360)636-1068 www.alsglobal.com

K1802038

ALS 1317 South 13th Ave Kelso WA, 98626

CHAIN OF CUSTODY



PAGE 1 OF ____

Attn: Shar Samy		PROJECT NAME / PROJECT NUMBER:				P.O.	P.O. NUMBER				LAB ORDER #					
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			967.5284		\$			T001	TSS - S	1 1 7 1	s Redppt				DUE DATE:	
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63-01-18		STW	١	4°C	YSB -18	303010412-	000		X							
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COMMENT * Report	S: Lead only															



PC MH

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eived: 3/6/18 Op	pened: $3/b$	48	By:	:4)r		Unloade	d: <u> </u>	<i>e [[8</i>]	Ву:	2	
Samples were received via?	USPS Fed Ex	$)$ $_{\it m}$	PS	DHL	PI	X Couri	er Han	d Delivered			
Samples were received in: (circle	e) Cooler	Box	E	envelop	e	Other			-	NA	
Were <u>custody seals</u> on coolers?	NA C	Y N	ļ	-	•	many and wh		1 fron-	<u> </u>		
If present, were custody seals in	tact?	Y / N	l 		·	t, were they			(<u></u>	N
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Were custody papers properly f	filled out (ink, sign	ed, etc.)	?						NA	(Y)	N
Were samples received in good	•							<i>.</i>	NA	(Y)	N
Were all sample labels complete	icable, tissue samp e (i.e analysis, pres				Froze	n Partially	y Thawed	Thawed	NA	$\binom{1}{2}$	N
Did all sample labels and tags a					or disci	repancies in t	he table on	page 2.	NA	(?)	N
Were appropriate bottles/conta	iners and volumes	receive	d for th	e tests	indicat	ed?			NA	(V)	N
). Were the pH-preserved bottles	s (see SMO GEN SO	P) recei	ved at t	he appi	ropriate	pH? <i>Indica</i>	te in the tab	ole below	NA	(Y)	N
I. Were VOA vials received with	hout headspace? I	ndicate	in the to	able be	low.				(NA	Y	N
2. Was C12/Res negative?									(NA)	Y	N
Sample ID on Bottle		Samp	le ID on	COC		4-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1		Identified by:			
						,,					
Sample ID	Bottle Count Bottle Type	Out of Temp	Head- space	Broke	рН	Reagent	Volume added	Reagent L Number		Initials	Time
Sample ID				Broke	рН	Reagent	1 1			Initials	Time
Sample ID				Broke	рН	Reagent	1 1			Initials	Time
Sample ID				Broke	рН	Reagent	1 1			Initials	Time
Sample ID				Broke	pH	Reagent	1 1			Initials	Time
Sample ID				Broke	рН	Reagent	1 1			Initials	Time
Sample ID Notes, Discrepancies, & Resol	Bottle Type			Broke	pH	Reagent	1 1			Initials	Time
	Bottle Type		space			Reagent	1 1			Initials	Time
	Bottle Type		space		рН	Reagent	4 1			Initials	Time
	Bottle Type		space			Reagent	4 1			Initials	Time

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General Chemistry

ALS Environmental—Kelso Laboratory 1317 South 13th Avenue, Kelso, WA 98626 Phone (360)577-7222 Fax (360)636-1068 www.alsglobal.com

Analytical Report

Client: NewFields Environmental

Project: Yosemite Slough - San Francisco Bay

Sample Matrix: Water

SM 2540 D

Prep Method: None

Analysis Method:

Service Request: K1802038

Date Collected: 03/1/18

Date Received: 03/6/18

Units: mg/L Basis: NA

Solids, Total Suspended (TSS)

Sample Name	Lab Code	Result	MRL	MDL	Dil.	Date Analyzed	Q
YSB-1803010412-000	K1802038-001	14.5	5.0	-	1	03/07/18 14:37	
Method Blank	K1802038-MB1	ND U	5.0	-	1	03/07/18 14:37	
Method Blank	K1802038-MB2	ND U	4.0	-	1	03/07/18 14:37	

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client: NewFields Environmental Service Request: K1802038

ProjectYosemite Slough - San Francisco BayDate Collected: NA

Sample Matrix: Water Date Received: NA

Date Analyzed: 03/07/18

Replicate Sample Summary General Chemistry Parameters

Sample Name: Batch QC Units: mg/L

Lab Code: K1801919-001 **Basis:** NA

Duplicate Sample

K1801919-

Analysis Sample 001DUP

Analyte NameMethodMRLMDLResultResultAverageRPDRPD LimitSolids, Total Suspended (TSS)SM 2540 D5.0-ND UND UNCNC10

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Printed 3/16/2018 12:30:48 PM Superset Reference:18-0000457593 rev 00

QA/QC Report

Client: NewFields Environmental **Service Request:** K1802038

Project: Yosemite Slough - San Francisco Bay **Date Analyzed:**

03/07/18

Sample Matrix:

Water

Date Extracted:

NA

Lab Control Sample Summary

Solids, Total Suspended (TSS)

Analysis Method: SM 2540 D **Units:**

mg/L

Prep Method: None

Basis:

NA

Analysis Lot:

582841

			Spike		% Rec
Sample Name	Lab Code	Result	Amount	% Rec	Limits
Lab Control Sample	K1802038-LCS	292	304	96	85-115

Analytical Report

Client: NewFields Environmental

Project: Yosemite Slough - San Francisco Bay

Sample Matrix: Water

SM 5310 C

Prep Method: None

Analysis Method:

Service Request: K1802038

Date Collected: 03/1/18

Date Received: 03/6/18

Units: mg/L Basis: NA

Carbon, Total Organic

Sample Name	Lab Code	Result	MRL	MDL	Dil.	Date Analyzed	Q
YSB-1803010412-000	K1802038-001	4.76	0.50	0.07	1	03/08/18 17:14	
Method Blank	K1802038-MB1	ND U	0.50	0.07	1	03/08/18 00:30	

QA/QC Report

Client: NewFields Environmental

Project Yosemite Slough - San Francisco Bay

Sample Matrix: Water

Date Collected:03/01/18
Date Received:03/06/18

Service Request:K1802038

Analysis Method: SM 5310 C **Prep Method:** None Units:mg/L Basis:NA

Replicate Sample Summary Carbon, Total Organic

				Sample	Duplicate			RPD	Date
Sample Name:	Lab Code:	MRL	MDL	Result	Result	Average	RPD	Limit	Analyzed
YSB-1803010412-000	K1802038-001DUP	0.50	0.07	4 76	4.72	4 74	<1	10	03/08/18

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Printed 3/16/2018 12:30:59 PM Superset Reference:18-0000457593 rev 00

QA/QC Report

Client: NewFields Environmental

Yosemite Slough - San Francisco Bay

Sample Matrix:

Project:

Water

Service Request:

K1802038

Date Collected:

03/01/18

Date Received:

03/06/18

Date Analyzed: Date Extracted: 03/8/18 NA

Matrix Spike Summary

Carbon, Total Organic

Sample Name: YSB-1803010412-000

Lab Code: K1802038-001

Analysis Method: SM 5310 C

Prep Method:

None

Units: Basis:

mg/L NA

Matrix Spike

K1802038-001MS

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Carbon, Total Organic	4.76	30.6	25.0	103	83-117

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Printed 3/16/2018 12:31:01 PM Superset Reference:18-0000457593 rev 00

QA/QC Report

Client: NewFields Environmental

Service Request: K1802038

Project: Yosemite Slough - San Francisco Bay

Date Analyzed:

03/08/18

Sample Matrix:

Water

Date Extracted:

NA

Lab Control Sample Summary

Carbon, Total Organic

Analysis Method: SM 5310 C

Units:

mg/L

Prep Method: None

Basis:

NA

Analysis Lot:

582867

			Spike		% Rec
Sample Name	Lab Code	Result	Amount	% Rec	Limits
Lab Control Sample	K1802038-LCS	24.4	24.0	102	83-117

QA/QC Report

Client: NewFields Environmental Service Request: K1802038

Project: Yosemite Slough - San Francisco Bay

Continuing Calibration Verification (CCV) Summary

Carbon, Total Organic

Analysis Method: SM 5310 C Units: mg/L

	Analysis Lot	Lab Code	Date Analyzed	True Value	Measured Value	Percent Recovery	Acceptance Limits
CCV1	582867	KQ1802986-37	03/07/18 23:57	25.0	25.3	101	90-110
CCV2	582867	KQ1802986-38	03/08/18 03:44	25.0	25.7	103	90-110
CCV3	582867	KQ1802986-39	03/08/18 09:19	25.0	25.5	102	90-110
CCV4	582867	KQ1802986-40	03/08/18 17:46	25.0	25.2	101	90-110
CCV5	582867	KQ1802986-41	03/09/18 00:08	25.0	25.6	102	90-110

QA/QC Report

Client: NewFields Environmental Service Request:K1802038

Project: Yosemite Slough - San Francisco Bay

Continuing Calibration Blank (CCB) Summary Carbon, Total Organic

Analysis Method: SM 5310 C Units:mg/L

	Analysis		Date					
	Lot	Lab Code	Analyzed	MRL	MDL	Result	Q	
CCB1	582867	KQ1802986-42	03/08/18 00:14	0.50	0.07	ND	U	
CCB2	582867	KQ1802986-43	03/08/18 04:00	0.50	0.07	ND	U	
CCB3	582867	KQ1802986-44	03/08/18 09:36	0.50	0.07	ND	U	
CCB4	582867	KQ1802986-45	03/08/18 18:02	0.50	0.07	ND	U	
CCB5	582867	KQ1802986-46	03/09/18 00:24	0.50	0.07	0.24	J	

Printed 3/16/2018 12:30:48 PM



Raw Data

ALS Environmental—Kelso Laboratory 1317 South 13th Avenue, Kelso, WA 98626 Phone (360)577-7222 Fax (360)636-1068 www.alsglobal.com



General Chemistry

ALS Environmental—Kelso Laboratory 1317 South 13th Avenue, Kelso, WA 98626 Phone (360)577-7222 Fax (360)636-1068 www.alsglobal.com

	KM00, K1994, K1000, K1000, K	2035, K2038	
Work R	Lequest # K1962, K1910, K1919, K1924, K1925	5, K1929 V1942 V19=	} -{
Tier:	IV I I TI	I I I	
	21-11	August Au	-
Date Ai	halyzed: $\frac{3/4/18}{0.000}$		
Analyst	: <u>UNO</u>	Run# 582841	
Analysi	s: <u>TS</u>		
	DATA QUALITY REPORT INORGANICS		
Explain	any "no" responses to questions below, and any corrective actions in the	e comments section below.	
1.	Is the method name and number correct and appropriate?	(yes/no/NA	
2.	Holding times met for all analyses and for all samples?	(ves/no/NA	
3.	Are calculations correct?	(yes/no/NA	
4.	Is the reporting basis correct? (Dry Weight)	yes/no/(NA)	
5.	All quality control criteria met?	⟨ÿĝs/no	
6.	Is the calibration curve correlation coefficient ≥ 0.995 ?	yes/no/(NA)	
7.	MBs, CCVs, CCBs, LCSs, Dups, and Spikes, analyzed at proper frequency?	(yes/no/NA	
8.	Are ICVs, CCVs, and CCBs all within acceptance limits?	(Fes/no/NA	
9.	Are results for methods blanks all ND?	(yes/no/NA	
10.	Are all QC samples within acceptance criteria? (LCS % rec, MS/DMS % rec, DUP or MS/DMS RPDs, etc.)	(Ves/no/NA	
11.	Are all exceptions explained?	yes/no(NA)	
12.	Have all applicable service requests been reviewed?	(yeş/no/NA	
13:	Are all samples labeled correctly?	(yes/no/NA	
14.	Have all instructions on the service request been followed? (e.g. Special MRLs, QC on a specific sample, Form V)	(ves/no/NA	,
15.	Are detection limits and units reported correctly?	Øes/no/NA	
16.	Is the unused space on the benchsheet crossed out?	(ves)/no/NA	
17.	Was analysis turned in by the due date? (n-2) (If not record SR#)	(yes/no/NA	

COMMENTS:

Final Approved by: Focus Date: 03/12/18

Date: 03/12/18

Analysis Lot:

582841 Method/Testcode: SM 2540 D/TSS

Instrument Name: K-Balance-31

Analyst: AMOONEY

# indicates Final Res Printed 3/9/18 16:08	18/21002	KO1802969-03	KQ1802969-02	KQ1802969-01	K1802038-001	K1802035-001	K1802030-001	K1802008-001	K1801999-002	K1801999-001	K1801995-001	K1801974-004	K1801974-003	K1801974-002	K1801974-001	K1801943-006	K180194	K1801943-004	K1801929-001	K1801925-001	K1801924-001	K1801919-001	K1801910-001	<u>Lab Code</u> K1801902-002	
Final Result 9/18 16:08	0	K9-03	69-02	969-01	8-001	5-001	0-001	8-001	9-002	9-001	5-001	4-004	4-003	4-002	4-001	3-006	K1801943-005.R01	3-004	9-001	5-001	4-001	9-001	0-001	<u>le</u> 12-002	
t is not yet ac	(TSS)	(TSS) Solids To	Solids, To	V	9	Solids, To	9	9	Solids, To	9		Solids, To			Solids, To	9		Solids, To	9	37.	Solids, To	.,		Target / Solids, To	
ljusted for Soli	en outpender	Total Suspended	Total Suspended	Total Suspended	Total Suspended	Total Suspended	Total Suspended	Total Suspended	Total Suspended	Total Suspended	Total Suspended	Total Suspended	Total Suspended	Total Suspended	Total Suspended	Total Suspended	Total Suspended	Total Suspended	Total Suspended	Total Suspended	Total Suspended	Total Suspended	Total Suspended	Target Analytes Solids, Total Suspended	
ds becaus	; {	£	DUP	DUP	N/A	N/A	N/A	N/A	N/N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A N/A	
indicates Final Result is not yet adjusted for Solids because it has not yet been determined. rinted 3/9/18 16:08			K1801919-001	K1802030-001		HALLES THE STATE OF THE STATE O															Management of the second secon			Parent Sample	•
etermined.	st arci	W/ster	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Matrix Water	
Results Summary	o.vo sign	J. 200 U.	J/gm 00.0	$0.80~\mathrm{mg/L}$	14.50 mg/L	0.40 mg/L	$0.40~\mathrm{mg/L}$	$80.00~\mathrm{mg/L}$	14.00 mg/L	6.00 mg/L	$3.00~\mathrm{mg/L}$	14.00 mg/L	62.00 mg/L	94.00 mg/L	438.00 mg/L	164.00 mg/L	55.00 mg/L	14.00 mg/L	3.00 mg/L	15.00 mg/L	65.00 mg/L	0.50 mg/L	$16.00~\mathrm{mg/L}$	Raw Result S 4.50 mg/L	
ummary	700 IIII.	200 mT	200 mL	250 mL	200 mL	250 mL	250 mL	50 mL	200 mL	200 mL	200 mL	50 mL	50 mL	50 mL	50 mL	25 mL	100 mL	150 mL	200 mL	200 mL	100 mL	200 mL	100 mL	Sample Amt. 200 mL	ŧ
	7, a 1/8m 2/C	₹0 ma/l II 1	5.0 mg/L U 1	4.0 mg/L U I	14.5 mg/L 1	4.0 mg/L U 1	4.0 mg/L U 1	80 mg/L 1	14.0 mg/L 1	6.0 mg/L 1	5.0 mg/L U 1	20 mg/L U 1	62 mg/L 1	94 mg/L 1	438 mg/L 1	164 mg/L 1	55 mg/L l	14.0 mg/L 1	5.0 mg/L U 1	15.0 mg/L 1	65 mg/L 1	5.0 mg/L U 1	16 mg/L 1	Final Result Dil 5.0 mg/L U 1	
A STATE OF THE STA		<i>i</i> i	5.0	4.0	5.0	4.0	4.0	20	5.0	5.0	5.0	20	20	20	20	40	10	6.7	5.0	5.0	10	5,0	10	MDL POL % Rec 5.0	
5	3		NC	S					REAL PROPERTY OF THE PROPERTY															% RSD	
	3///10 [4.3/	2/7/10 14:27	3/7/18 14:37	3/7/18 14:37	3/7/18 14:37	3/7/18 14:37	3/7/18 14:37	3/7/18 14:37	3/7/18 14:37	3/7/18 14:37	3/7/18 14:37	3/7/18 14:37	3/7/18 14:37	3/7/18 14:37	3/7/18 14:37	3/7/18 14:37	3/7/18 14:37	3/7/18 14:37	3/7/18 14:37	3/7/18 14:37	3/7/18 14:37	3/7/18 14:37	3/7/18 14:37	Date Analyzed 3/7/18 14:37	1
Page 1 of 2	2	7 '	z	Z	Z	z	Z	Z	Z	Z	Z	z	Z	Z	Z	Z	Z	Z	Z	Z	z	Z	Z	OC? Tier	
of 2	V	TX)	_	=	Ň	П		proset proset			_	– Paç	_ је 24	_ of 59	9-	_	⊢ ∹		_	П			June sel	Tier IV	

Instrument Nar	Instrument Name: K-Balance-31		Analyst: AMOONEY	Y	Analysis Lot:	582841 M	[ethod/]	582841 Method/Testcode: SM 2540 D/TSS	2540 D/TSS		
<u>Lab Code</u> KQ1802969-03	Target Analytes Solids, Total Suspended (TSS)	M (C	Parent Sample Matrix Water	ix Raw Result 0.00 mg/L	Sample Amt. 200 mL	Final Result Dil 5.0 mg/L U 1	IGM	PQL % Rec % RSD 5.0	Date Analyzed 3/7/18 14:37	N IV	Tier
KQ1802969-04	Solids, Total Suspended (TSS)	MB	Water	0.00 mg/L	250 mL	4.0 mg/L U 1	***************************************	4.0	3/7/18 14:37 N IV	z	N N
KQ1802969-04	Solids, Total Suspended (TSS)	MB	Water	r 0.00 mg/L	250 mL	4.0 mg/L U 1		4.0	3/7/18 14:37	N IA	VI
KQ1802969-05	, Total Suspended	SOT	Water	r 292.00 mg/L	50 mL	292 mg/L 1		20 96	3/7/18 14:37	Z Z	V
KQ1802969-05	Solids, Total Suspended LCS (TSS)	LCS	Water	292.00 mg/L	50 mL	292 mg/L 1		20 96	3/7/18 14:37 N IV	z	VI

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[#] indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

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Analysis:				Total Sus	pended Sol	ids		Meth	od: EPA SM 254	0 D		_
Sample #	Row#	Pan Number	Comments	Sample Volume (ml)	Wt. Filter + Dry sample (1) (g)	Wt. Filter + Dry sample (2) (g)	Wt. Filte Dry sam (3) (g)	ple Wt. Filte	Wt. Dry Sample (g)	TSS (mg/L)	TSS (mg/L) reported	Constan Weight?
MB	1	T33087		200	0.1010	0.1011		0.1010	0.0000	0.00	ND	Y
MB	2	T33086		250	0.1012	0.1012		0.1012	0.0000	0.00	ND	Y
LCS	3	T33085		50	0.1153	0.1153		0,100	7 0.0146	292.00	292.0	Y
K1801902-002	4	T33084		200	0.1015	0.1015		0.1006	0.0009	4.50	ND	Y
K1801919-001	5	T33083		200	0.1020	0.1019		0.1019	0.0001	0.50	ND	Y
K1801910-001	6	T33082		100	0.1009	0.1013		0.0993	0.0016	16.00	16.0	Y
K1801924-001	7	T33081		100	0.1058	0.1056		0.0993	0.0065	65.00	65.0	Y
K1801925-001	8	T33080		200	0.1050	0.1053		0.1020		15.00	15.0	Y
K1801929-001	9	T33079		200	0.1023	0.1024		0.1013	0.0006	3.00	ND	Y
K1801974-001	10	T33078		50	0.1212	0,1213		0.0993		438.00	438.0	Y
K1801974-002	11	T33077		50	0.1046	0.1050		0.0999		94.00	94.0	Y
K1801974-003	12	T33075		50	0.1050	0.1051		0.1019		62.00	62.0	Y
K1801974-004	13	T33074		50	0.1016	0,1020		0.1009		14.00	ND	Y
K1801995-001	14	T33073		200	0.1032	0.1036		0.1026		3.00	ND	Y
K1802038-001	15	T33072		200	0.1029	0.1029	<u> </u>	0,1000		14.50	14.5	Y
K1802030-001	16	T33071	LLCA	250	0.1011	0.1015		0.1010		0.40	ND	Y
K1802035-001	17	T33069	LLCA	250	0.0991	0.0995		0.0990		0.40	ND	Y
K1801943-004	18	T33068	notify >50	150	0.1043	0.1045		0.1022		14.00	14.0	Y
K1801943-005	19	T33067	notify >50	100	0.1043	0.1043		0.1022		55.00	55.0	
K1801943-006	20	T33066	notify > 30	25	0.1039	0.1032		0.1003		 		Y
K1801949-001	21	T33065	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	200	0.1020	0.1047		0.1003		6.00	164,0	Y
K1801999-002	22	T33064		200	0.1020	0.1024		0.1003			6.0	
K1801999-002 K1802008-001	23	T33064		50	0.1051	0.1053		0.1023		14.00	14.0	Y
K1802030-001D	24	T33062	LLCA	250	0.1001	0.1003				80.00	80.0	Y
K1802030-001D	25	T33062	LLCA	200	0.1024	0.1017	i	0.1014		0.80	ND	Y
Calculation: Susp		<u> </u>	(ma/l) = M	L		1	Volumo	 	······································	0.00	ND	Y
ERA #:4033	CHAC		200118	ID# TDS/1		11-23-C	T.V. =	306	Filter Lot #	105 oven: K -	OVENUO	
Wt (1) Start			03/07/18	Wt (2) S		03/09/18		Start		: Oven digital		
Stop		11:27	03/09/18	,	15:24	03/09/18	El .	Stop	1 Hermoneter	. Oven digital		
Wt (1) Start		105		Wt (2) S				Start				
Temp Stop		105		Temp S	105		1 '	Stop				
Wt (4) Start]	Wt (5) S	tart	1	Wt (6)	Start	8			
							(0)	***************************************				
Stop					Stop		L	Stop				
Wt (4) Start					tart		` ′	Start				1
Temp Stop				Temp S	top		Temp	Stop		date	time	
	AM			<u> </u>				Date Ana		03/07/18	14:37	
Reviewed By:		1100	wy	7				Date Rev	iewed: 03	<u> </u>		:
rev 12-04-18		8	//	1								

ALS ENVIRONMENTAL

Analysis:		Tota	l Suspende	d Solids			Method	EPA SM 254	10 D	
			CCV	Verification	SN: 67095					
l st weigh	1.0000 g	≤(+/- 0.1%)	2 nd weigh	0.0100 g	≤(+/- 0.1%)	^{3rd} weigh	1.0000 g	≤(+/- 0.1%)	^{4rd} weigh	0.0100 g
CCV1	1.0000	100.00%	CCV2	0.0101	101.00%	CCV5	1.0000	100.00%	CCV6	0.0101
Date/time	03/09/18 1	3:00	Date/time	03/09/18 1	3:00	Date/time	03/09/18 1	5:45	Date/time	03/09/18 15
CCV3	1.0000	100.00%	CCV4	0.0100	100.00%	CCV7	1.0000	100.00%	CCV8	0.0102
Date/time	03/09/18 1	3:15	Date/time	03/09/18 1	3:15	Date/time	03/09/18 1	5:55	Date/time	03/09/18 15
1 st weigh	1.0000 д	≤(÷/- 0,1%)	2 nd weigh	0.0100 g	<(+/- 0.1%)	^{3rd} weigh	g 0000.1	<(÷/- 0,1%)	^{4rd} weigh	0.0100 g
CCV9	7.0000 g	0.00%	CCV10	0.0100 g	0.00%	CCV13	1.0000 g	0.00%	CCV14	0.0100 g
Date/time			Date/time		and the second s	Date/time		1	Date/time	
CCV11		0.00%	CCV12		0.00%	CCV15		0.00%	CCV16	
Date/time			Date/time			Date/time			Date/time	
1 st weigh	1.0000 g	<(+/- 0.1%)	2 nd weigh	0.0100 g	<(+/- 0.1%)	^{3rd} weigh	1.0000 g	<(+/- 0,1%)	^{4rd} weigh	0.0100 g
CCV		0.00%	CCV		0.00%	CCV		0.00%	CCV	
Date/time			Date/time			Date/time		oodaanii ka kiine ye ka	Date/time	
CCV		0.00%	CCV	**************************************	0.00%	CCV		0.00%	CCV	**************************************
Date/time			Date/time			Date/time			Date/time	
1 st weigh	1.0000 g	≤(+/~ 0.1%)	2 nd weigh	0.0100 g	≤(+/- 0.1%)	^{3rd} weigh	1.0000 g	≤(+/- 0.1%)	^{4rd} weigh	0.0100 g
CCV		0.00%	CCV		0.00%	CCV		0.00%	CCV	
Date/time		***************************************	Date/time			Date/time	THE PERSON NAMED OF THE PE		Date/time	
CCV		0.00%	CCV		0.00%	CCV		0.00%	CCV	
Date/time			Date/time		 	Date/time		 	Date/time	

			CCV	Verification	SN: 6549					
l weigh	1.0000 g	≤(+/- 0.5%)	2 weigh	0.0100 g	≤(÷/- 0.5%)	weigh	1.0000 g	<u>≤(+/- ().5%)</u>	weigh	0.0100 g
CCVI		0.00%	CCV2		0.00%	CCV5		0.00%	CCV6	
CCV3	į	0.00%	CCV4		0.00%	CCV7		0.00%	CCV8	

| Analyzed By: AM | Date Analyzed: 03/07/18 14:37 | Reviewed By: | Date Reviewed: 03/12/13

DATA QUALITY REPORT INORGANICS "no" responses to questions below, and any corrective actions in the comments section below. The method name and number correct and appropriate? "mo" responses to questions below, and any corrective actions in the comments section below. The method name and number correct and appropriate? "mo" responses to questions below, and any corrective actions in the comments section below. The method name and number correct and appropriate? "mo" responses to questions below, and any corrective actions in the comments section below. The method name and number correct and appropriate? "mo" responses to questions below, and any corrective actions in the comments section below. The method name and number correct and appropriate? "mo" responses to questions below, and any corrective actions in the comments section below. The control criteria net? "mo" responses to questions below, and any corrective actions in the comments section below. The control criteria net? "mo" responses to questions below, and any corrective actions in the comments section below. The control network of the propriate? "mo" responses to questions below, and any corrective actions in the comments section below. The control network of the control network of the control network of the propriate? "mo" responses to questions below. The control network of the cont	Tier:		
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results for methods blanks all ND? vestno/NA verall QC samples within acceptance criteria? vestno/NA verall applicable service requests been reviewed? verall samples labeled correctly? verall instructions on the service request been followed? verall ministructions on the service request been followed? verall ministructions on the service request been followed? verall instructions on the service request been followed? verall ministructions on the service request been followed? verall samples labeled correctly? verano/NA verano	7.	MBs, CCVs, CCBs, LCSs, Dups, and Spikes, analyzed at proper frequency?	(yes/no/NA
e all QC samples within acceptance criteria? 28 % rec, MS/DMS % rec, DUP or MS/DMS RPDs, etc.) 28 all exceptions explained? 29 yes/no/NA 20 all samples labeled correctly? 30 yes/no/NA 31 yes/no/NA 32 yes/no/NA 33 yes/no/NA 34 yes/no/NA 35 yes/no/NA 36 yes/no/NA 37 yes/no/NA 38 yes/no/NA 39 yes/no/NA 30 yes/no/NA 30 yes/no/NA 30 yes/no/NA 31 yes/no/NA 32 yes/no/NA 33 yes/no/NA 34 yes/no/NA 35 yes/no/NA 36 yes/no/NA 37 yes/no/NA 37 yes/no/NA 38 yes/no/NA 39 yes/no/NA 40 yes/no/NA 41 yes/no/NA 42 yes/no/NA 43 yes/no/NA 44 yes/no/NA 45 yes/no/NA 46 yes/no/NA 47 yes/no/NA 48 yes/no/NA 48 yes/no/NA 49 yes/no/NA 49 yes/no/NA 40 yes/no/NA 40 yes/no/NA 41 yes/no/NA 41 yes/no/NA 42 yes/no/NA 43 yes/no/NA 45 yes/no/NA 46 yes/no/NA 46 yes/no/NA 47 yes/no/NA 48 yes/no/NA	8.	Are ICVs, CCVs, and CCBs all within acceptance limits?	(yes)no/NA
e all exceptions explained? e all exceptions explained? e all applicable service requests been reviewed? e all instructions on the service request been followed? g. Special MRLs, QC on a specific sample, Form V) e detection limits and units reported correctly? he unused space on the benchsheet crossed out? s analysis turned in by the due date? (n-2) (If not record SR#) TS: 17 MS TO R not within acceptance limits Fore water samples.	9.	Are results for methods blanks all ND?	(yes/no/NA
we all applicable service requests been reviewed? we all samples labeled correctly? we all instructions on the service request been followed? Special MRLs, QC on a specific sample, Form V) detection limits and units reported correctly? we unused space on the benchsheet crossed out? s analysis turned in by the due date? (n-2) (If not record SR#) TS: 17 M5 To R not within acceptance limits ore water samples.	10.	Are all QC samples within acceptance criteria? (LCS % rec, MS/DMS % rec, DUP or MS/DMS RPDs, etc.)	yes/flo/NA
e all samples labeled correctly? We all instructions on the service request been followed? Special MRLs, QC on a specific sample, Form V) detection limits and units reported correctly? we he unused space on the benchsheet crossed out? s analysis turned in by the due date? (n-2) (If not record SR#) TS: 17 MS TO R not within acceptance limits ore water samples.	11.	Are all exceptions explained?	yes/no/NA
we all instructions on the service request been followed? Special MRLs, QC on a specific sample, Form V) detection limits and units reported correctly? we sho/NA the unused space on the benchsheet crossed out? s analysis turned in by the due date? (n-2) (If not record SR#) TS: 17 MS TO R not within acceptance limits ore water samples. 2006-2 DOC - Carry over-	12.	Have all applicable service requests been reviewed?	(yes/no/NA
s. Special MRLs, QC on a specific sample, Form V) redetection limits and units reported correctly? yes/no/NA reserved in by the due date? (n-2) (If not record SR#) yes/no/NA reserved reserve	13.	Are all samples labeled correctly?	ves/no/NA
the unused space on the benchsheet crossed out? So analysis turned in by the due date? (n-2) (If not record SR#) TS: - 17 M5 % R not within acceptance limits Fore water samples. 2006-2 DOC - Carry over-	14.	Have all instructions on the service request been followed? (e.g. Special MRLs, QC on a specific sample, Form V)	(yès)no/NA
s analysis turned in by the due date? (n-2) (If not record SR#) TS: - 17 M5 % R not within acceptance limits Fore water samples. 2006-2 DOC - Carry over.	15.	Are detection limits and units reported correctly?	(yes/no/NA
rs: - 17 MS % R not within acceptance limits rore water samples. 2006-2 DOC - carry over.	16.	Is the unused space on the benchsheet crossed out?	
-17 MS TO R not within acceptance limits ore water samples. 2006-2 DOC - carry over.	17.	Was analysis turned in by the due date? (n-2) (If not record SR#)	(yes/no/NA
2006-2 DOC - carry over-	COM	MENTS:	
	رد ا	167-17 MS % R not within accept pore water samples.	tance limits
red by: Huy Date: 03/13/18 DOREPORT	R	A 2006-2 DOC - carry over-	
DQREPORT DQREPORT	Final 4	Approved by: Hull 11 Date: 03/13	s/R
/A	Final A	Approved by: Date: 03[13	DQREPORT

\$1802076-00J £1802025-002 ₹1801917-002 ₹1801735-001 .ab Code TQ1802986-20 .Q1802986-19 :Q1802986-18 Q1802986-17 Q1802986-15 (Q1802986-14 Q1802986-08 Q1802986-02 Q1802986-0 ₹1801917-005 <1801917-004</p> ₹1801917-003 <1801917-001 ₹1801755-008 .Q1802986-21 (Q1802986-16 ;Q1802986-13 (Q1802986-12 (Q1802986-11 `Q1802986-10 Q1802986-09 CQ1802986-07 Q1802986-06 Q1802986-05 Q1802986-04 Q1802986-03 (1802076-002 (1802038-00) (1802025-003 (1802025-001 1801917-007 <1801917-006</p> Instrument Name: K-TOC-03 Carbon, Total Organic Target Analytes and CIVID DUP QUAD TRP DUP DUP DUP MUD DUP N/A N/A N/A TRP QUAD MS DUP \overline{S} DUP DUP $\frac{1}{2}$ N/A N/A N/N N/A N/A N/A N/A N/A N/A N/A Z/A K1801917-002 K1801917-002 K1801917-001 K1801917-004 K1801917-003 K1801917-003 K1801917-003 K1801917-002 K1801917-001 K1801917-001 K1802025-003 K1802025-001 K1801735-001 K1801735-00 K1801755-008 K1802076-001 K1802076-001 K1801917-001 K1802025-002 K1802025-001 K1802076-002 Parent Sample Analyst: CSETHE Water Matrix Water Raw Result 27.29 mg/L 28.75 mg/L 5.61 mg/L 31.62 mg/1 1.34 mg/L 26.58 mg/l 2.33 mg/L 1.77 mg/L 2.21 mg/L 1.90 mg/L 2.27 mg/L 2.27 mg/L 2.25 mg/L 1.43 mg/L 0.98 mg/I 0.06 mg/L 2.48 mg/L 5.90 mg/L 1.97 mg/L 1.48 mg/L 0.77 mg/L 1.97 mg/L 0.05 mg/L 1.91 mg/L 1.36 mg/1 4.76 mg/L 1.45 mg/L1.18 mg/L 1.55 mg/L 2.47 mg/L 1.49 mg/L 1.20 mg/L 2.46 mg/L 1.88 mg/I 1.40 mg/L 1.51 mg/L Sample Amt Analysis Lot: 10 ml 10 m 10 ml [0 m] 10 ml 10 ml 10 ml $10 \, \mathrm{m}$ 10 ml 10 ml 10 ml $10 \, \text{ml}$ 10 ml 10 m $10 \, \mathrm{ml}$ 10 ml 10 ml 10 ml l0 ml 10 ml 10 ml 10 ml 10 ml 0.50 mg/L U 0.50 mg/L U Final Result 1.77 mg/L 2.21 mg/L 2.27 mg/L 1.91 mg/L 1.20 mg/L 1440 mg/L 0.77 mg/L 27.3 mg/L 0.98 mg/L1.45 mg/L $1.40~\mathrm{mg/L}$ $1.97~\mathrm{mg/L}$ 1.88 mg/L 2.25 mg/L 1.36 mg/L 118 mg/L $1.97~\mathrm{mg/L}$ 1.55 mg/L 1.49 mg/L 1.34 mg/L1.43 mg/L 1.90 mg/L 26.6 mg/L 112 mg/L 4.76 mg/L $1.18 \, \text{mg/L}$ 2.46 mg/L 114 mg/L 1.51 mg/L $47 \, mg/L$ 632 mg/L 1.48 mg/L 123 mg/L 50 mg/L 582867 Method/Testcode: SM 5310 C/TOC T <u>50</u> 50 50 20 20 20 20 20 MDL 0.070.07 0.07 0.07 0.070.07 0.07 222 0.50 0.50 **POL** 25 0.50 0.50 0.50 0.50 0.500.50 0.50 0.500.500.500.50 25 0.50 0.500.50 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.500.5010 0 10 10 % Rec 103 05 102 103 % RSD Z www 965 19 61 00 9 V Date Analyzed 3/8/18 11:28 3/8/18 11:28 3/8/18 10:25 3/8/18 07:28 3/8/18 05:37 3/8/18 12:31 3/8/18 07:28 3/8/18 08:3 3/8/18 04:49 3/8/18 01:53 3/8/18 11:28 3/8/18 10:25 3/8/18 10:25 3/8/18 07:28 3/8/18 06:57 3/8/18 06:25 3/8/18 06:09 3/8/18 05:21 3/8/18 04:17 3/8/18 03:12 3/8/18 01:53 3/8/18 03:12 3/8/18 14:37 3/8/18 17:14 3/8/18 06:57 3/8/18 06:25 3/8/18 05:37 3/8/18 11:28 3/8/18 07:28 3/8/18 04:17 3/8/18 02:24 3/8/18 15:39 3/8/18 13:34 3/8/18 12:31 3/8/18 10:25 3/8/18 04:49 Z Z Z CZZZZZZ Z Z ZZ Z ZZ Z \mathbf{Z} Z Z Z ZZ Z Z \mathbf{Z} Z Z ZZ Z Z**Z** Z Z

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indicates Final Result is not yet adjusted for Solids because it has not yet been determined

Results Summary

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3/12/18

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Page 1 of 3

Instrument Name: K-TOC-03 Analyst: CSETHE Analysis Lot: 582867 Method/Testcode: 9060/TOCT

==	zz	3/8/18 00:14 3/8/18 00:14		0.50	0.07	0.50 mg/L U 1	10 ml	-0.10 mg/L	Water		ССВ	Carbon, Total Organic	Q1802986-42
: II	z	3/9/18 00:08	200			25.6 mg/L 1	10 ml	25.59 mg/L	Water		CCV	Carbon, Total Organic	Q1802986-41
III	z	3/9/18 00:08	2	-		25.6 mg/L 1	10 ml	25.59 mg/L	Water	***************************************	CCV	Carbon, Total Organic	Q1802986-41
II	Z	3/9/18 00:08	67	<u> </u>		25.6 mg/L 1	10 ml	25.59 mg/L	Water		CCV	Carbon, Total Organic	Q1802986-41
П	z	3/8/18 17:46	*****	01		25.2 mg/L 1	10 ml	25.24 mg/L	Water		CCV	Carbon, Total Organic	Q1802986-40
≡	Z	3/8/18 17:46	Walt	0		25.2 mg/L 1	10 ml	25.24 mg/L	Water		CCV	Carbon, Total Organic	Q1802986-40
	Z	3/8/18 17:46	<u>~</u> }	Ō.		25.2 mg/L 1	10 ml	25.24 mg/L	Water		CCV	Carbon, Total Organic	Q1802986-40
	Z	3/8/18 09:19	102	-		25.5 mg/L 1	10 ml	25.55 mg/L	Water		CCV	Carbon, Total Organic	₹Q1802986-39
=	Z	3/8/18 09:19	ည် က	ō		25.5 mg/L l	10 ml	25.55 mg/L	Water		CCV	Carbon, Total Organic	Q1802986-39
=	Z	3/8/18 09:19	آ	7 o j		25.5 mg/L 1	10 ml	25.55 mg/L	Water		CCV	Carbon, Total Organic	Q1802986-39
III	z	3/8/18 03:44	7	5.01		25.7 mg/L 1	10 ml	25.75 mg/L	Water		CCV	Carbon, Total Organic	CQ1802986-38
П	Z	3/8/18 03:44	wi	102		25.7 mg/L 1	10 ml	25.75 mg/L	Water		CCV	Carbon, Total Organic	Q1802986-38
П	Z	3/8/18 03:44	~i _	5		25.7 mg/L 1	10 ml	25.75 mg/L	Water		CCV	Carbon, Total Organic	CQ1802986-38
П	z	3/7/18 23:57		0		25.3 mg/L 1	10 ml	25.35 mg/L	Water		CCV	Carbon, Total Organic	CQ1802986-37
П	Z	3/7/18 23:57	gaare 6	0		25.3 mg/L 1	10 ml	25.35 mg/L	Water		CCV	Carbon, Total Organic	CQ1802986-37
П	Z	3/7/18 23:57	- * * * * * * * * * * * * * * * * * * *	~·		25.3 mg/L 1	$10 \mathrm{ml}$	25.35 mg/L	Water		CCV	Carbon, Total Organic	₹Q1802986-37
	Z	3/8/18 00:47	2	0.50 102	0.07	24.4 mg/L - 1	lm 01	24.37 mg/L	Water		LCS	Carbon, Total Organic	CQ1802986-36
≔ ge 3	z	3/8/18 00:47	2	0.50 102		24.4 mg/L 1	10 ml	24.37 mg/L	Water		LCS	Carbon, Total Organic	CQ1802986-36
II	Z.	3/8/18 00:47	2	0.50 102	0.07	24.4 mg/L 1	10 ml	24.37 mg/L	Water		LCS	Carbon, Total Organic	₹Q1802986-36
II	z	3/8/18 00:30		0.50	0.07	0.50 mg/L U 1	10 ml	-0.01 mg/L	Water	tensis — — — — — — — — — — — — — — — — — —	МВ	Carbon, Total Organic	Q1802986-35
Ξ	Z	3/8/18 00:30		0.50	0.07	0.50 mg/L U 1	10 ml	$-0.01 \mathrm{mg/L}$	Water		MB	Carbon, Total Organic	Q1802986-35
	Z	3/8/18 00:30		0.50		0.50 mg/L U 1	10 ml	-0.01 mg/L	Water		MB	Carbon, Total Organic	CQ1802986-35
N	z	3/8/18 17:14	<u> </u>	0.50	0.07	4.72 mg/L 1	10 ml	4.72 mg/L	Water	K1802038-001	DUP	Carbon, Total Organic	CQ1802986-34
	Z	3/8/18 18:19	ت	0.50 103	0.07	30.6 mg/L 1	10 ml	30.58 mg/L	Water	K1802038-001	MS	Carbon, Total Organic	Q1802986-33
	Z	3/8/18 15:39	ω	0.50		$1.37 \mathrm{mg/L}$ 1	$10 \mathrm{ml}$	$1.37 \mathrm{mg/L}$	Water	K1801917-007	QUAD	Carbon, Total Organic	₹Q1802986-32
V	z	3/8/18 15:39	1	0.50	0.07	1.44 mg/L 1	10 ml	1.44 mg/L	Water	K1801917-007	TRP	Carbon, Total Organic	Q1802986-31
	Z	3/8/18 15:39		0.50		1.46 mg/L 1	10 ml	1.46 mg/L	Water	K1801917-007	DUP	Carbon, Total Organic	₹Q1802986-30
	Z	3/8/18 14:37	4	0.50		1.34 mg/L 1	10 ml	1.34 mg/L	Water	K1801917-006	QUAD	Carbon, Total Organic	₹Q1802986-29
IV	z	3/8/18 14:37	4	0.50	0.07	1.40 mg/L 1	10 ml	1.40 mg/L	Water	K1801917-006	TRP	Carbon, Total Organic	CQ1802986-28
	Z	3/8/18 14:37	7	0.50		1.30 mg/L 1	10 ml	$1.30~\mathrm{mg/L}$	Water	K1801917-006	DUP	Carbon, Total Organic	Q1802986-27
	Z	3/8/18 13:34	4	0.50	0.07	0.75 mg/L 1	10 ml	0.75 mg/L	Water	K1801917-005	QUAD	Carbon, Total Organic	₹Q1802986-26
W	z	3/8/18 13:34	Š	0.50	0.07	0.70 mg/L 1	10 ml	0.70 mg/L	Water	K1801917-005	TRP	Carbon, Total Organic	CQ1802986-25
VI	Z	3/8/18 13:34	4	0.50	0.07	0.74 mg/L 1	10 ml	0.74 mg/L	Water	K1801917-005	DUP	Carbon, Total Organic	₹Q1802986-24
	Z .	3/8/18 12:31	2	0.50		1.54 mg/L 1	10 ml	1.54 mg/L	Water	K1801917-004	QUAD	Carbon, Total Organic	Q1802986-23
V	z					- '	10 ml		Water	K1801917-004	TRP	Carbon, Total Organic	CQ1802986-22
	0	Date Analyzed	Rec % RSD	POL % Rec	MDL 1	Final Result Dil	Sample Amt.	Raw Result Sa	Matrix	Parent Sample	0C	Target Analytes	_ab Code

indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Instrument Name: K-TOC-03 Analyst: CSETHE Analysis Lot: 582867 Method/Testcode: SM 5310 C/TOC T

= = Page 31 of	3/8/18 01:36 N	3/8. 3/8	0.50	0.07 0.07	0.47 mg/L J 1 0.47 mg/L J 1	10 ml 10 ml	0.47 mg/L 0.47 mg/L	Water Water	ADOT	Carbon, Total Organic LOQV Carbon, Total Organic LOQV	<q1802986-48 <q1802986-48< th=""></q1802986-48<></q1802986-48
	3/9/18 00:24 N 3/8/18 01:20 N 3/8/18 01:20 N	3/9, 3/8, 3/8,	0.50 0.50 0.50	0.07 0.07 0.07	0.24 mg/L J i 0.17 mg/L J i 0.17 mg/L J 1	10 ml 10 ml	0.24 mg/L 0.17 mg/L 0.17 mg/L	Water Water Water	CCB LODV LODV	1	XQ1802986-46 XQ1802986-47 XQ1802986-47
	3/8/18 18:02 N 3/9/18 00:24 N 3/9/18 00:24 N	3/8 3/9 3/9	0.50 0.50 0.50	0.07 0.07 0.07	0.50 mg/L U I 0.24 mg/L J I 0.24 mg/L J I	10 ml 10 ml 10 ml	-0.02 mg/L 0.24 mg/L 0.24 mg/L	Water Water Water	ССВ	Carbon, Total Organic Carbon, Total Organic Carbon, Total Organic	KQ1802986-45 KQ1802986-46 KQ1802986-46
	3/8/18 09:36 N 3/8/18 18:02 N 3/8/18 18:02 N	3/8 3/8 3/8	0.50 0.50 0.50	0.07 0.07 0.07	0.50 mg/L U 1 0.50 mg/L U 1 0.50 mg/L U 1	10 ml 10 ml	-0.01 mg/L -0.02 mg/L -0.02 mg/L	Water Water Water	ссв ссв	Carbon, Total Organic Carbon, Total Organic Carbon, Total Organic	KQ1802986-44 KQ1802986-45 KQ1802986-45
	3/8/18 04:00 N 3/8/18 09:36 N 3/8/18 09:36 N	3/8 3/8,	0.50 0.50 0.50	0.07 0.07 0.07	0.50 mg/L U 1 0.50 mg/L U 1 0.50 mg/L U 1	10 ml 10 ml 10 ml	0.03 mg/L -0.01 mg/L -0.01 mg/L	Water Water Water	ссв ссв	Carbon, Total Organic Carbon, Total Organic Carbon, Total Organic	KQ1802986-43 KQ1802986-44 KQ1802986-44
C? Tier	Date Analyzed QC? 3/8/18 00:14 N 3/8/18 04:00 N 3/8/18 04:00 N	<u>% RSD</u> Date3/83/8	POL % Rec 0.50 0.50 0.50	0.07 0.07 0.07	Final Result Dil 0.50 mg/L U 1 0.50 mg/L U 1 0.50 mg/L U 1 0.50 mg/L U 1	Sample Amt. 10 ml 10 ml 10 ml	Raw Result S -0.10 mg/L 0.03 mg/L 0.03 mg/L	Parent Sample Matrix Water Water Water Water	855 855 90	Target Analytes Carbon, Total Organic Carbon, Total Organic Carbon, Total Organic	<u>Lab Code</u> KQ1802986-42 KQ1802986-43 KQ1802986-43

indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analysis Lot:

582868 Method/Testcode: 9060/TOCD

Instrument Name: K-TOC-03

Analyst: CSETHE

	Page 1 of 2	Pagi							There	Results Summary	Results				inted 3/12/18 17:43
				1/18	CES/3/12/18	C	-3	S. S	And Welled			Hermined.	e it has not yet been di	indicates Final Result is not yet adjusted for Solids because it has not yet been determined.	indicates Final Resub
	<u> </u>	29 N	3/9/18 01:29					,	25.3 mg/L	10 ml	25.29 mg/L	Water		Carbon, Dissolved Organic CCV (DOC)	Q1802987-19
***	VI	33 N	3/8/18 22:33	2		0.50	0.07	-	7.55 mg/L	10 ml	7.55 mg/L	Water	K1801267-017	Carbon, Dissolved Organic QUAD (DOC)	Q1802987-18
	ΛĬ	33 Z	3/8/18 22:33	Δ		0.50	0.07	_	7.83 mg/L	10 ml	7.83 mg/L	Water	K1801267-017	Carbon, Dissolved Organic TRP (DOC)	Q1802987-17
	VI	33 Z	3/8/18 22:33	<u>^</u>	-	0.50	0.07	1	7.88 mg/L	10 ml	7.88 mg/L	Water	K1801267-017	Carbon, Dissolved Organic DUP (DOC)	Q1802987-16
i	ΙV	40 N	3/9/18 00:40) 58*	0.50	0.07	-	22.4 mg/L	10 ml	22.40 mg/L	Water	K1801267-017	Carbon, Dissolved Organic MS (DOC)	Q1802987-15
	VI	30 Z	3/8/18 21:30	2		0.50	0.07	Ĭ	5.55 mg/L	10 ml	5.55 mg/L	Water	K1801267-008	Carbon, Dissolved Organic QUAD (DOC)	Q1802987-14
	IV	30 N	3/8/18 21:30	2	-	0.50	0.07	pd.	5.57 mg/L	10 ml	5.57 mg/L	Water	K1801267-008	Carbon, Dissolved Organic TRP	Q1802987-13
ı	VI	30 N	3/8/18 21:30	2		0.50	0.07	Joseph	5.35 mg/L	10 ml	5.35 mg/L	Water	K1801267-008	Carbon, Dissolved Organic DUP (DOC)	Q1802987-12
	H	24 N	3/9/18 00:24		~	0.50	0.07		0.24 mg/L J	10 ml	$0.24~{ m mg/L}$	Water		Carbon, Dissolved Organic CCB (DOC)	Q1802987-11
	П	02 N	3/8/18 18:02		-	0.50	0.07	1	0.50 mg/L U	10 ml	-0.02 mg/L	Water		Carbon, Dissolved Organic CCB (DOC)	Q1802987-10
Pa		36 N	3/8/18 09:36		-	0.50	0.07	_	0.50 mg/L U	10 ml	-0.01 mg/L	Water		Carbon, Dissolved Organic CCB (DOC)	Q1802987-09
ge 32		08 Z	3/9/18 00:08		ロロン			<u>`</u>	25.6 mg/L	10 ml	25.59 mg/L	Water		Carbon, Dissolved Organic CCV (DOC)	Q1802987-08
of 5	II	46 N	3/8/18 17:46		0				25.2 mg/L	10 ml	25.24 mg/L	Water		Carbon, Dissolved Organic CCV (DOC)	Q1802987-07
- 1	II	19 N	3/8/18 09:19		201			Ì	25.5 mg/L	10 ml	25.55 mg/L	Water		Carbon, Dissolved Organic CCV (DOC)	Q1802987-06
	П	09 N	3/8/18 10:09) 101	0.50	0.07	,	24.3 mg/L	10 ml	24.27 mg/L	Water		Carbon, Dissolved Organic LCS (DOC)	Q1802987-05
	П	52 N	3/8/18 09:52		-	0.50	0.07	_	0.50 mg/L U	10 ml	£60000000000003£	Water		Carbon, Dissolved Organic MB (DOC)	Q1802987-04
i		42 N	3/8/18 20:42	14*		0.50	0.07	-	1.49 mg/L	10 ml	1.49 mg/L	Water	K1802006-002	Carbon, Dissolved Organic DUP (DOC)	Q1802987-03
	П	14 N	3/8/18 21:14) 102	0.50	0.07		27.2 mg/L	10 ml	27.21 mg/L	Water	K1802006-002	Carbon, Dissolved Organic MS (DOC)	.Q1802987-02
		39 N	3/8/18 19:39	2	~	2.0	0.3	4	60.9 mg/L	10 ml	15.21 mg/L	Water	K1802006-001	Carbon, Dissolved Organic DUP	.Q1802987-01
I	II	42 N	3/8/18 20:42	w)	0.50	0.07	·	1.71 mg/L	10 ml	1.71 mg/L	Water	THE PROPERTY OF THE PROPERTY O	Carbon, Dissolved Organic N/A (DOC)	.1802006-002
		39 Z	3/8/18 19:39		Ŭ	2.0	0.3	4	59.8 mg/L	10 ml	14.96 mg/L	Water		Carbon, Dissolved Organic N/A (DOC)	.1802006-001
	 	:33 N	3/8/18 22:33)	0.50	0.07		7.85 mg/L	10 ml	7.85 mg/L	Water		(DOC) (DOC)	.1801267-017
- , -	OC? Tier		Date Analyzed 3/8/18 21:30	% RSD	% Rec	POL 0.50	MDL 0.07		Final Result 5.47 mg/L	Sample Amt. 10 ml	Raw Result 5.47 mg/L	Matrix Water	Parent Sample	Target Analytes QC Carbon, Dissolved Organic N/A	<u>ab Code</u> .1801267-008

<u>ab Code</u> Q1802987-19 Q1802987-20 Instrument Name: K-TOC-03 Q1802987-20 Carbon, Dissolved Organic CCB (DOC)
Carbon, Dissolved Organic CCB (DOC) Target Analytes QC Carbon, Dissolved Organic CCV (DOC) Parent Sample Matrix
Water Analyst: CSETHE Water Water Raw Result Sample Amt. 25.29 mg/L 10 ml $25.29 \, \mathrm{mg/L}$ $0.20~\mathrm{mg/L}$ 0.20 mg/L Analysis Lot: 10 ml 10 ml Final Result Dil 25.3 mg/L 1 $0.19 \,\mathrm{mg/L}$ J 1 0.19 mg/L J 1 582868 Method/Testcode: SM 5310 C/TOC D MDL0.070.07PQL % Rec % RSD Date Analyzed 3/9/18 01:29 0.50 0.50 0 3/9/18 01:45 3/9/18 01:45 N II Z Z \equiv

Results Summary

Page 33 of 59

TOC: 582867 DOC: 582868

Schedule: 03072018B

Version: 6

Instrument: Fusion1

Last Saved by: Fusion1 (Fusion1)
Last Saved on: 2018/03/08 22:39 - Thursda

osition	Sample Type	Sample ID	Method ID (Calibration ID)		bu]	Rep
Clean)	Clean	Clean	tana arang mang tanan mang tanan sa mang mang mang mang mang mang mang man	reserve recommendate de la company	have the same that we have the same	Mariana Amin'n	1
Clean)	Clean	Clean		energial de la contraction de		~~~	1
Clean)	Clean	Clean		iaidhaileochalalaidheac		dedenschalselijt	1
Blank)	Blank	Reagent/Acid Blank	At hailganese seur la Abrarde Gall makkisassi	al elen Austre	ak Sklamek Lan	A commenced and the contract of the contract o	1
)	Sample	RB	Extended Reaction 021711	(Extended	Reaction 02	a fallanda katala kifarti j	1
}		[TOC] CCV 021711 [25 ppm]	Extended Reaction 021711				1
))		[TOC] CCB 021711 [0.0 ppm]	Extended Reaction 021711				
	Sample Sample	MB1	Extended Reaction 021711				1
ed Coldanië 	ALLEGO LVALLES CONTRACTOR AND	[TOC] LCS ER [24.0 ppm]	Extended Reaction 021711				1
	Sample Samualu	ICS THE STATE OF T	AT AN AT A TOMBOOK OF THE PROPERTY OF THE PROPERTY OF A TOMBOOK ASSESSMENT AS A TOMBOOK OF THE PROPERTY OF THE	SAME TO CONSTRUCT AND AND ADDRESS OF THE PARTY	REPORT OF THE PRODUCT OF THE PROPERTY OF THE		1
*************	Enclose en la compressión de l	LOD	Extended Reaction 021711	relieu i recessor estado da el maio	MAY 10		. Avarra ,
	Sample	San 7-7-7-7 to	Extended Reaction 021711				1
	Sample	LOO: 0220 001 01 20	Extended Reaction 021711	Mile GGC GGGALTE JCLE	aidin . i varnijojiiijataiji um	and properly and the second of	1
#2431-1531485143144 -	Sample	K1802076-001.01 20x	Extended Reaction 021711	project, and a segment of the segmen	nación i e e a lattica de Parciadologicamicanos, indica		2
	Sample	K1802076-001.01 ms.20x	Extended Reaction 021711				<u>M</u>
	Sample	RB	Extended Reaction 021711			1/11) 2	2 2
	Sample	K1802076-002.01.20x	Extended Reaction 021711	ATAL	was a consideration of the constant of the con		
} 	in and the second contract of the second cont	[TOC] CCV 021711 [25 ppm]	Extended Reaction 021711				1
)	Da via modinaronidonalidadetatatoridadeta	[TOC] GCB 021711 [0.0 ppm]	Extended Reaction 021711	alle herale december leaded	hones he sadyamondavayay. Or	a tavav., a) rav., r., apa a)	1
0	Sample	K1801755-008.05	Extended Reaction 021711				2
	Sample	K1801735-001.02 50x	Extended Reaction 021711	tental two remarks on the contract	**************************************		2
2	Sample	K1801735-001.02 ms 50x	Extended Reaction 021711	(Extended	Reaction 021		1
3	Sample	K1802025-001.03	Extended Reaction 021711	(Extended	Reaction 021	(711)	2
4	Sample	K1802025-001.03 ms	Extended Reaction 021711				1
5	Sample	K1802025-002.03	Extended Reaction 021711	(Extended	Reaction 021	1711) 2	2
6	Sample	K1802025-003.04	Extended Reaction 021711	(Extended	Reaction 021	1711) [2	2
7	Sample	K1801917-001.13	Extended Reaction 021711	(Extended	Reaction 021	711)	4
8	Sample	K1801917-001.13 ms	Extended Reaction 021711				1
9	Sample	RB	Extended Reaction 021711			711) 2	2
}		[TOC] CCV 021711 [25 ppm]	Extended Reaction 021711	Mile: Coloro dictioned been	to a color to the average average to a gra		ezzentek eta
). Jerografia		[TOC] CCB 021711 [0.0 ppm]	Extended Reaction 021711				10
0	Sample	MB2	Extended Reaction 021711				1
Fill and the		[TOC] LCS ER [24:0 ppm]	Extended Reaction 021711	CATAL IN TRACES COTTANIES OF THE	makery and responsible termination of the control o	egrane angegre é ay er ana ng	i
-1	Sample	K1801917-002.13	Extended Reaction 021711	abi ada minara 4.20	COANGE OF THE CHARLEST CANADA	Andrew Andrew	4
2	Sample	K1801917-003 13	Extended Reaction 021711	water . They wanted and the tea	aparen and appropriate the second	annan Laran	4
3	Sample	K1801917-004.13	Extended Reaction 021711				4
4	Sample	K1801917-005.13	Extended Reaction 021711				Դ 4 թ
5	Sample	K1801917-006.13	Extended Reaction 021711	And the transfer of the total	MY	**************************************	· ivivii
6	Sample	K1801917-000.13	for a commercial contribution of the contribution and a contribution of the contributi	and the second second second second	de la la que debarbas desarrol per conqu	.,	4 4
7		RB	Extended Reaction 021711	mings a red to a water ago a se garge	or a contract of the second contraction from	Secretariations .	105556
	Sample		Extended Reaction 021711	where the experience of the same	re 1.5 ft. The Makes are assumed index	V/25 ATAVAYATAVAVAT 171	2
8	Sample	K1802038-001.02	Extended Reaction 021711	often out there is a second	the tier is the mathematical and also	in animiation is in	2
***************************************		[TOC] CCV 021711 [25 ppm]	Extended Reaction 021711			vat simatutivatais,	30000
	for a second field a desired and a second day satisfacion	[TOC] CCB 021711 [0.0 ppm]	Extended Reaction 021711				1
9	Sample	K1802038-001.02 ms	Extended Reaction 021711				
0	Sample	RB 1000 1000 FF FF	Extended Reaction 021711	vision of the second section of the second s	na na makamban awan na m	***************************************	2
1	Sample	FB 3/5/18	Extended Reaction 021711				2
2	Sample	K1802006-001 doc 4x	Extended Reaction 021711				2
3	Sample	RB	Extended Reaction 021711				
4	Sample	K1802006-002 doc	Extended Reaction 021711				2
5	Sample	K1802006-002 ms doc	Extended Reaction 021711	(Extended	Reaction 021		
6	Sample	K1801267-008.10 doc	Extended Reaction 021711				4
7	Sample	K1801267-017.04 doc	Extended Reaction 021711	77 V303 A1 A17A3-	12	AS AVANNS ALASS AS A ALT	
8	Sample	RB	Extended Reaction 021711	ydan	\$17. \$2. **\$V * VASVOY \$YCT: 4VAVOTYAY! * 4VA		2
(Turining) }		[TOC] CCV 021711 [25 ppm]	Extended Reaction 021711				
		[TOC] CCB 021711 [0.0 ppm]	Extended Reaction 021711				1

Page 1

Schedule: 03072018B

Position	Sample Type	Sample ID	Method ID (Calibration ID)	S
39		K1801267-017.04 ms doc	Extended Reaction 021711 (Extended Reaction 021711) 1	-
40	Sample	RB	Extended Reaction 021711 (Extended Reaction 021711) 2	W
			Extended Reaction 021711 (Extended Reaction 021711) 1	
D	Check Standard	[TOC] CCB 021711 [0.0 ppm]	Extended Reaction 021711 (Extended Reaction 021711) 1	2018
			house the second	

Printed on: March 12, 2018 14:44:43 Page 2

0.418				OBSERVATIONS	8	BELOW
0.508	0.508	0.508	0.508	STD Deviation	0.11313	0.5077
0.540	0.540	0.540	0.540	AVERAGE	0.55528	0.5395
0.507	0.507	0.507	0.507	UCL	0.66841	0.507
0.515	0.515	0.515	0.515	LCL	0.44214	0.5147
0.498	0.498	0.498	0.498			0.4978
0.749						ABOVE
0.708				OBSERVATIONS	5	ABOVE
				STD Deviation	0.17225	BELOW
				AVERAGE	0.51334	BELOW
				UCL	0.68559	BELOW
				LCL	0.34109	BELOW
						BELOW
						BELOW
				OBSERVATIONS	5	BELOW
				STD Deviation	0.17225	BELOW
				AVERAGE	0.51334	BELOW
				UCL	0.68559	BELOW
				LCL	0.34109	BELOW
						BELOW
						BELOW
				OBSERVATIONS	5	BELOW
				STD Deviation	0.01767	BELOW
				AVERAGE	0.51334	BELOW
						BELOW
						BELOW
						BELOW
						BELOW
						BELOW
						BELOW

03/13/18 Harry ICAL Date 7/24/17

ICAL ID: 11-GEN-05-59A

LCS = 24.0 ppm APG 4013 Lot: 010615 (Ref: 11-GEN-05-63J)

CCV = 25.0 ppm (Ref: 11-GEN-05-64C)

Spike: 0.05 ml of 5000 ppm stock ----> 10.0 ml = 25.0 ppm x Dilution Factor (Ref: 11-GEN-05-63C)

ICS TV = 25.0 ppm %Rec=4

ICS ID: 11-GEN-05-63E

Date: 3/7/18

Fusion Report - 03072018B Wednesday, March 07, 2018 10:15 PM

(View - Reps, Unused Reps, Meta-Data, Signature, History) Printed on 2018/03/12 14:45 -Monday

Report Summary Information

Company Location:

Gen Chem Lab

Schedule Name:

Instrument Name:

03072018B

Engine

1.1.5.1

Fusion1

Version: Firmware

1.2.0696

Report Version:

1 of 1

Version:

Connection: RS232 COM1

Report Creation by Operators (schedule

Sample Type: Clean

Fusion1 (Fusion1) (v1) Fusion1 (Fusion1) (v3)

version):

Fusion1 (Fusion1) (v5)

Fusion1 (Fusion1) (v6)

Comment:

Report Results

03/13/18 W From Schedule Version 1

	Pos	Analysis Type	Sample ID	Start Time
	(clean)		Clean	2018/03/07 22:15
,				

Rep #	Base Analysis Type	Adjusted (Abs)	NDIR (Abs)	Baseline (Abs)	Pressure (psig)	Run Time
1	IC Clean	11.54	16.85	5.31	46.85	08:00
2	TC Clean	5.86	8.38	2.53	49.42	07:17
3	TC Clean	2.57	5.08	2.51	49.48	07:00
4	TC Clean	1.94	4.64	2.71	49.56	07:04

Sample Type: Blank (Creating v1092) From Schedule Version 1 Analysis Pos Sample ID Start Time Type (blank) Reagent/Acid Blank 2018/03/07 22:49 Base

Rep #	Analysis Type	Adjusted (Abs)	NDIR (Abs)	Baseline (Abs)	Pressure (psig)	Run Time
1	IC Clean	0.82	3.46	2.63	46.64	08:00
			h li HVad Vid VII i Vistada Pland i da Albado Abado	and the state of t	**************************************	PERIODAL PREPIRED AND ENGLISHED AND AND ENGLISHED ASSESSED.
2	TC Clean	3.74	6.36	2.62	49.54	07:17
3	TC Clean	2.50	5.17	2.67	49.53	07:02
						ethind transition transition and resident from the first transition and transition or construction of the con-

4	TC Clean	2.55	5.38	2.83	49.49	
5	Reagent Blank	6.26	8.90	2.64	70.10	
6	Acid Blank		4.08	2.36	46.40	

Sar	nple	Type: Sample							Fro	om	Schedule V	'ersion
	Pos	Analysis Type	Sample ID	Result (p	opmC)		l. Dev. pmC)	RSE	D		Start Time	turkan kantan dan dan ka
•	D	TOC	RB	0.80	35 ppm	0.	0000 ppm	0.0000)%	20	18/03/07 23	3:41
Re		Base nalysis Type	ppm	ha	Adjus (Abs		NDIR (A	\bs)	Baseli (Abs		Pressure (psig)	Run Time
1		TOC	0.8035	8.0345		17.33	The state of the s	20.12	2.	.79	49.55	12:29
		<u> Dilution</u>	Blank Contribution	Me	ethod		Calibra	ition				
		1:10	(TC) 11.4746 (IC) (v1092)		ed Reactio 711 (v3)	on	Extended f 021711		n			

<u>}a</u>	mple	e Type: (Check Standard -	> C(CV 021711					From	Schedule V	ersion
		s BAT	Concentration (ppm)	Dil	Sample ID	Min / I (% de		Result	Std. De	v. RSD	Start Ti	me
•	В	TOC	25.0000	,	[TOC] CCV 021711 [25 ppi	0 / infi m] (NA /		25.86 pp (PAS	m pp	00 0% om	2018/03/07	23:57
P	os ,	Base Analysis Type	i ID	Rep #	ppm	hā	Adju	ısted	NDIR	Baseline	Pressure	Run Time
Ε	3	TOC	25 ppm	1	25.8631	258.6309		200.64	203.22	2.58	49.55	12:28

Completion State	Success Action	<u>Method</u>	<u>Calibration</u>	STD Conc - Pos B
Success - Criteria	Do Nothing	Extended Reaction	Extended Reaction	50 ppmC
met.		021711 (v3)	021711 (v16)	

Any teng	Pos	BAT	Concentration (ppm)	Dil	Sample ID	Min / (% d		Result	Std. De	v. RSD	Start T	ime
•	D	TOC	0.0000		[TOC] CCB 021711 [0.0 ppn	0 / inf n] (NA /		0.418 ppn (PASS	n pr	00 0% om	2018/03/08	3 00:14
P	os A	Base nalysis Type	identification in the state of	Re #	p ppm	hâ	Adj	usted	NDIR	Baseline	Pressure	Run Time
Ι)	TOC	0.0 ppm	1	0.4181	4.1807		15.33	17.98	2.65	49.51	12:31
		pletion ess - C		cess o Not	Action hing Ext	<u>Method</u> ended Re	-		llibration ded Reactio	***************************************	Ocnc - Po	s D

Po	os Analysis Type	Sample ID	Result (ppmC)		. Dev. omC)	RSE		Start Time	
) 1	TOC	MB1	0.50)77 ppm	0.	0000 ppm	0.0000)% 20	18/03/08 00	:30
Rep #	Base Analysis Type	ppm	ha	Adjust (Abs		NDIR (A	Abs)	Baseline (Abs)	Pressure (psig)	Run Time
1	TOC	0.5077	5.0768		15.17		17.75	2.58	49.52	12:33
	<u>Dilution</u> 1:10	Blank Contribution (TC) 11.4746 (IC) (v1092)	Extende	ethod ed Reactio 711 (v3)	n	Calibra Extended i 021711	Reactio	n		

ut i	пріе	<u>rype</u> : (Check Standard	> LC	SER						From	Schedule V	ersion
	Pos	BAT	Concentration (ppm)	Dil	Sample ID	e ID Min / Max (% dev)		Result	Std. De		RSD	Start Time	
•	2	TOC	24.0000	1:1	[TOC] LCS EI [24.0 ppm]	R 0/infi (NA/I	,	24.885 pp (PAS	n p	000 pm	0%	2018/03/08	00:47
Ро	s A	Base nalysis Type	i ID	Rep #	ppm	hā	Adj	usted	NDIR	Ва	seline	Pressure	Run Time
2		TOC	24.0 ppm	1	24.8859	248.8586		193.52	196.11		2.58	49.50	12:31

Sar	nple	Type: Sample							From	Schedule V	ersion
	Pos	Analysis Type	Sample ID	Result (_l	ppmC)		Dev. mC)	RSI)	Start Time)
•	3	ТОС	ICS	1.00	04 ppm	0.0	0000 ppm	0.000	0% 20	18/03/08 01	I:03
Re #		Base nalysis Type	ppm	hā	Adjuste (Abs)	d	NDIR (A	∖bs)	Baseline (Abs)	Pressure (psig)	Run Time
1		TOC	1.0004	10.0035	1	8.76		21.44	2.68	49.49	12:29
	Pos	1:10 Analysis Type	(TC) 11.4746 (I (v1092) Sample ID	,	ed Reaction 711 (v3)	Std.	Extended F 021711 Dev.		em d C Nicol de de que forma en promocor paraceros accessos acceso	Start Time	e d'anner de la company de
*	4	TOC	LOD	0.68	71 ppm	~~	mC) 0000 ppm	0.0000)% 20	18/03/08 01	:20
Re		Base nalysis Type	ppm	ha	Adjuste (Abs)	d	NDIR (A	vps)	Baseline (Abs)	Pressure (psig)	Run Time
1		TOC	0.6871	6.8715	1	6.48		19.09	2.61	49.51	12:31
	Ī	<u>Dilution</u> 1:10	Blank Contribut (TC) 11.4746 (II (v1092)	C) Extende	ethod ed Reaction 711 (v3)	E	<u>Calibra</u> Extended F 021711	Reactio	n	TO NOT THE STATE OF THE STATE O	

Pos	Analysis Type	Sample ID	Des par particular de l'accession de la	Result (ppmC)	(pp	Dev. mC)	RSI	.w.m.w.m.m.m.m.m.m.m.m.m.m.m.m.m.m.m.m.	Start Time	
* 5	TOC	LOQ		0.97	'85 ppm	0.0	0000 ppm	0.000)% 20 ⁻	18/03/08 01	:36
Rep # /	Base Analysis Type	ppm		μg	Adju (Ab		NDIR (A	Abs)	Baseline (Abs)	Pressure (psig)	Run Time
1	TOC	0.9785		9.7852		18.60		21.43	2.83	49.49	12:31
	Dilution	Blank Contrib	ution	M	<u>ethod</u>		Calibra	tion			
	1:10	(TC) 11.4746 (v1092)	(IC)		ed React 711 (v3)	ion E	Extended F 021711		ก		
Pos	Analysis Type	Sample ID	antonio de constituiro con constituir de c	Result (ppmC)		Dev. mC)	RSI		Start Time	nene transpordnetrammane
6	TOC	K1802076-001.01	1 20x	6.26	80 ppm	0.2	2011 ppm	3.210)% 20 ⁻	18/03/08 01	:53
Rep #	Base Analysis Type	ppm	ener Marie de la companya de la comp	μg	Adju (At		NDIR (A	(bs)	Baseline (Abs)	Pressure (psig)	Run Time
1	TOC	6.4102		64.1022	personance consistent to observe the selection	58.16		60.67	2.51	49.50	
2	TOC	6.1259	er tada a tanada er er a tada er	61.2585	14 145 5444 145 445 445 445 445 455	56.09	observation of the state of the	58.82	2.73	49.51	12:2
	<u>Dilution</u> 1:10	Blank Contrib (TC) 11.4746 (v1092)		Extend	lethod ed React 711 (v3)	ion E	Calibra Extended F 021711	Reactic	n		
Pos	Analysis Type	Sample ID		Result (ppmC)		Dev. mC)	RSI)	Start Time	
	тос	K1802076-001.0 20x	1 ms	32.13	32.1338 ppm		0000 ppm	0.000	0% 20	2018/03/08 02:2	
Rep	Base Analysis Type	ppm	hâ	Adju (Al		NDIR (A	\bs)	Baseline (Abs)	Pressure (psig)	Run Time	
1	TOC	32.1338	*******	321.3385	······································	245.50		248.09	2.59	49.48	12:3
	<u>Dilution</u>	Blank Contrib			<mark>lethod</mark> ed React	ion E	<u>Calibra</u> Extended f	Reactic	n		
	1:10	(TC) 11.4746 (v1092)	(-)		711 (v3)		021711	(010)			
Pos	Δnalvsis		,			Std. (ppr	Dev.	RSE)	Start Time	
Pos	Analysis	(v1092)		021 Result (p		Std. (ppr	Dev.	RSE		Start Time	
● 8 Rep	Analysis Type	(v1092) Sample ID		021 Result (p	opmC)	Std. (ppr 0.12	Dev. nC)	RSE 19.410	0% 20	16.1	2:41 Run
	Analysis Type TOC Base Analysis Type TOC	Sample ID RB ppm 0.7065		021 Result (0.62 µg 7.0651	opmC) 12 ppm Adju	Std. (ppr 0.12 sted os) 16.62	Dev. nC) 206 ppm	RSE 19.410 \bs) 19.29	0% 20 Baseline (Abs) 2.67	18/03/08 02 Pressure (psig) 49.46	2:41 Rur Time 12:2
	Analysis Type TOC Base Analysis Type	Sample ID RB		021 Result (р 0.62 µg	opmC) 12 ppm Adju	Std. (ppr 0.12 sted os)	Dev. nC) 206 ppm	RSE 19.410 \bs)	0% 20 Baseline (Abs)	18/03/08 02 Pressure (psig)	2:41 Rur Time 12:2
• 8 Rep # .	Analysis Type TOC Base Analysis Type TOC TOC Dilution	(v1092) Sample ID RB ppm 0.7065 0.5360 Blank Contrib	oution	021 Result (µ 0.62 µg 7.0651 5.3597	Adju (Al	Std. (ppr 0.12 sted os) 16.62 15.38	Dev. mC) 206 ppm NDIR (A	RSE 19.410 Abs) 19.29 18.13	0% 20 Baseline (Abs) 2.67 2.75	18/03/08 02 Pressure (psig) 49.46	2:41 Rur Tim 12:2
• 8 Rep # .	Analysis Type TOC Base Analysis Type TOC TOC	(v1092) Sample ID RB ppm 0.7065 0.5360	oution	021 Result (µ 0.62 µg 7.0651 5.3597	npmC) 12 ppm Adju (Al	Std. (ppr 0.12 sted os) 16.62 15.38	Dev. mC) 206 ppm	RSE 19.410 Abs) 19.29 18.13 ation Reaction	0% 20 Baseline (Abs) 2.67 2.75	18/03/08 02 Pressure (psig) 49.46	2:41 Rur Time 12:2
• 8 Rep # .	Analysis Type TOC Base Analysis Type TOC TOC Dilution 1:10	(v1092) Sample ID RB ppm 0.7065 0.5360 Blank Contrib (TC) 11.4746	oution	021 Result (µ 0.62 µg 7.0651 5.3597	Adju (All lethod ed Reactive) (711 (v3)	Std. (ppr 0.12 sted os) 16.62 15.38 ion [Dev. mC) 206 ppm NDIR (A	RSE 19.410 Abs) 19.29 18.13 ation Reaction	0% 20 Baseline (Abs) 2.67 2.75	18/03/08 02 Pressure (psig) 49.46	2:41 Rur Time 12:2 12:2
• 8 Rep # 1 1	Analysis Type TOC Base Analysis Type TOC TOC Dilution 1:10 Analysis	(v1092) Sample ID RB ppm 0.7065 0.5360 Blank Contrib (TC) 11.4746 (v1092)	oution (IC)	021 Result (µ 0.62 µg 7.0651 5.3597 Normalized Result (Adju (All lethod ed Reactive) (711 (v3)	Std. (ppr 0.12 sted os) 16.62 15.38 iion [Dev. mC) 206 ppm NDIR (A Calibra Extended I 021711 Dev.	RSE 19.410 Abs) 19.29 18.13 ation Reactio (v16)	0% 20 Baseline (Abs) 2.67 2.75	18/03/08 02 Pressure (psig) 49.46 49.46	2:41 Run Time 12:20
* 8 Rep # 1 2 Pos * 9	Analysis Type TOC Base Analysis Type TOC TOC Dilution 1:10 Analysis Type	(v1092) Sample ID RB ppm 0.7065 0.5360 Blank Contrib (TC) 11.4746 (v1092) Sample ID	oution (IC)	021 Result (µ 0.62 µg 7.0651 5.3597 Normalized Result (Adju (Alled Read (711 (v3)	Std. (ppr 0.12 sted os) 16.62 15.38 iion Std. (pr 0.7 sted	Dev. mC) 206 ppm NDIR (A Calibra Extended I 021711 Dev. pmC)	RSE 19.410 19.29 18.13 ation Reaction (v16) RSI	0% 20 Baseline (Abs) 2.67 2.75	18/03/08 02 Pressure (psig) 49.46 49.46	2:41 Run Time 12:20
* 8 Rep # 1 2 Pos * 9	Analysis Type TOC Base Analysis Type TOC TOC Dilution 1:10 Analysis Type TOC Base Analysis Analysis Type TOC Base	(v1092) Sample ID RB ppm 0.7065 0.5360 Blank Contrib (TC) 11.4746 (v1092) Sample ID K1802076-002.0	oution (IC)	021 Result (µ 0.62 µg 7.0651 5.3597 Extend 021 Result (DepmC) 12 ppm Adju (All lethod led React 1711 (v3) ppmC) 201 ppm Adju	Std. (ppr 0.12 sted os) 16.62 15.38 iion Std. (pr 0.7 sted	Dev. mC) 206 ppm NDIR (A Calibra Extended I 021711 Dev. omC) 1087 ppm	RSE 19.410 19.29 18.13 ation Reaction (v16) RSI	0% 20 Baseline (Abs) 2.67 2.75 on 0% 20 Baseline	Pressure (psig) 49.46 49.46 Start Time 18/03/08 03	2:41 Rur Tim 12:2 12:2 Rur Rur

Dilution 1:10 Blank Contribution (TC) 11.4746 (IC) (v1092) Method Extended Reaction 021711 (v3) <u>Calibration</u> Extended Reaction 021711 (v16)

Sample Type: Check Standard --> CCV 021711

From Schedule Version 1

	Pos	BAT	Concentration (ppm)	Dil	Sample ID	Min / Max (% dev)	Result	Std. Dev.	RSD	Start Time
	В	TOC	25.0000	1:2	[TOC] CCV	0 / infinity	26.2584	0.0000	0%	2018/03/08 03:44
1					021711 [25 ppm]	(NA/NA)	ppm	ppm		
1	1			A			(PASS)			

Pos	Base Analysis Type	ID	Rep #	ppm	μg	Adjusted	NDIR	Baseline	Pressure	Run Time	
В	TOC	25 ppm	1	26.2584	262.5841	203.52	206.19	2.67	49.48	12:28	

Completion State
Success - Criteria
met.

Success Action
Do Nothing

Method Extended Reaction 021711 (v3) Calibration
Extended Reaction

021711 (v16)

STD Conc - Pos B

50 ppmC

Sample Type: Check Standard --> CCB 021711

From Schedule Version 1

X	Pos	BAT	Concentration (ppm)	Dil	Sample ID	Min / Max (% dev)	Result	Std. Dev.	RSD	Start Time
•	D	TOC	0.0000	}		0 / infinity	0.5395	0.0000	0%	2018/03/08 04:00
				*********	021711 [0.0 ppm]	(NA/NA)	(PASS)	ppm		

Pos	Base Analysis Type	ID	Rep #	ppm	μg	Adjusted	NDIR	Baseline	Pressure	Run Time
D	TOC	0.0 ppm	1	0.5395	5.3945	16.22	18.91	2.70	49.48	12:33

Completion State
Success - Criteria
met.

Success Action
Do Nothing

Method Extended Reaction 021711 (v3) <u>Calibration</u> Extended Reaction 021711 (v16)

STD Conc - Pos D

0 ppmC

Sample Type: Sample

From Schedule Version 1

Pos	Analysis Type	Sample ID	Result (ppmC)	Std. Dev. (ppmC)	RSD	Start Time
● 10	TOC	K1801755-008.05	0.5710 ppm	0.0082 ppm	1.4300%	2018/03/08 04:17

Rep #	Base Analysis Type	ppm	μg	Adjusted (Abs)	NDIR (Abs)	Baseline (Abs)	Pressure (psig)	Run Time
1	TOC	0.5652	5.6522	15.59	18.25	2.66	49.47	12:30
2	TOC	0.5768	5.7675	15.68			49.47	12:24

Dilution 1:10 Blank Contribution (TC) 11.4746 (IC) (v1092) Method Extended Reaction 021711 (v3) <u>Calibration</u> Extended Reaction 021711 (v16)

/tames	Pos	Analysis Type	Sample ID	Result (ppmC)	Std. Dev. (ppmC)	RSD	Start Time
-		algo y a tambiga di Jahan yanga di Amanina di Amanina di Pinang					

1	1 TOC	K1801735-001.02	2 50x	2.88	18 ppm	0.	1366 ppm	4.740	0% 20	18/03/08 04	:49
Rep #	Base Analysis Type	ppm	ŀ	ıg	Adju: (Ab		NDIR (A	(bs)	Baseline (Abs)	Pressure (psig)	Run Time
1	TOC	2.9784		29.7844		33.17		35.88	2.71	49.47	12:29
2	TOC	2.7852		27.8524		31.76		34.61	2.85	49.44	12:27
	<u>Dilution</u> 1:10	Blank Contrib (TC) 11.4746 (v1092)		Extende	<u>ethod</u> ed React 711 (v3)	ion I	Calibra Extended F 021711	Reactic	on		
P	Analysis Type	Sample ID		Result (ppmC)		. Dev. omC)	RSI)	Start Time	
1	2 TOC	K1801735-001.0 50x	2 ms	29.26	43 ppm	***************************************) 0000 ppm	0.000	0% 20	18/03/08 05	5:21
Rep #	Base Analysis Type	ppm	ı	19	Adju (At		NDIR (A	\bs)	Baseline (Abs)	Pressure (psig)	Run Time
1	TOC	29.2643	2	92.6435	***********	224.60	2	27.43	2.82	49,44	12:34
	Dilution	Blank Contrib	oution	M	ethod		Calibra	ation			
	1:10	(TC) 11.4746 (v1092)		Extend	ed React 711 (v3)	ion I	Extended F 021711	Reactio	on	y yaya waladaya di bankat kayi dankat kiya danka biraya kaya k	Contraction of the State of the
P	os Analysis Type	Sample ID		Result (ppmC)		. Dev. omC)	RSI	D	Start Time	
1	13 TOC K1802025-001.03		.03	1.59	57 ppm	0.	1434 ppm	8.990	0% 20	18/03/08 05	5:37
Rep #	Base Analysis Type	ppm		ıg	Adju (Al	3	NDIR (A	Abs)	Baseline (Abs)	Pressure (psig)	Run Time
1	TOC	1.6971		16.9706		23.83		26.52	2.69	49.42	12:26
2	TOC	1.4943		14.9426	111/140-0-1 12-0-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	22.36		25.27	2.91	49.45	12:27
	<u>Dilution</u> 1:10	Blank Contrib (TC) 11.4746 (v1092)		Extend	<u>lethod</u> ed Reacl 711 (v3)	ion	Calibra Extended F 021711	Reactio	on		
Р	os Analysis Type	Sample ID	nana washing taki in ta	Result (ppmC)		. Dev. omC)	RSI	D	Start Time	
1	4 TOC	K1802025-001.0	13 ms	27.09	02 ppm	0.0	0000 ppm	0.000	0% 20	18/03/08 06	5:09
Rep	Base Analysis Type	ppm	I	nā	Adju (Al		NDIR (A	/bs)	Baseline (Abs)	Pressure (psig)	Run Time
1	TOC	27.0902	2	270.9018		208.77	2	211.40	2.63	49.46	12:3
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	<u>Dilution</u>	Blank Contrib	ution	<u>N</u>	lethod		Calibra	ation			
	1:10	(TC) 11.4746 (v1092)			ed Reac 711 (v3)	tion	Extended I 021711		on		
Р	os Analysis Type	Sample ID	The same of the sa	Result (ppmC)		. Dev. omC)	RSI	D	Start Time	
•	5 TOC	K1802025-002	2.03	1.83	372 ppm	0.	1778 ppm	9.680	0% 20	18/03/08 06	3:25
Rep #	Base Analysis Type	ppm		ng	Adju (Al		NDIR (A	Abs)	Baseline (Abs)	Pressure (psig)	Run Time
1	TOC	1.9629		19.6289		25.77		28.51	2.74	49.47	12:20
2	TOC	1.7115		17.1148		23.94		26.70	2.76	49.47	12:2:
	<u>Dilution</u> 1:10	Blank Contrib (TC) 11.4746			<mark>lethod</mark> ed Reac	tion	<u>Calibra</u> Extended l		on		

n hartmedge a nekartan d	**************************************	(v1092)	021	711 (v3)	,	021711	(V16)			manan o sananan a karandara ba
Po	Analysis Type	Sample ID	Result (_J	opmC)		Dev. mC)	RSE)	Start Time	
1	6 TOC	K1802025-003.0	4 2.45	19 ppm	0.0)505 ppm	2.0600	0% 20	18/03/08 06	3:57
Rep #	Base Analysis Type	ppm	hā	Adjus (Ab		NDIR (A	Abs)	Baseline (Abs)	Pressure (psig)	Run Time
1	TOC	2.4876	24.8756	1/1-forth boat mins to boat own on a	29.59	- Carrier Colores on C	32.36	2.76	49.47	12:26
2	TOC	2.4162	24.1615	···	29.07		31.82	2.74	49.47	12:26
	<u>Dilution</u> 1:10	Blank Contribu (TC) 11.4746 ((v1092)	IC) Extende	<u>ethod</u> ed Reacti 711 (v3)	on f	<u>Calibra</u> Extended I 021711	Reactio	n		
Po	Analysis Type	Sample ID	Result (opmC)		Dev. omC)	RSE		Start Time	
♦ 1	7 TOC	K1801917-001.1	3 1.92	30 ppm),0	0792 ppm	4.1200	0% 20)18/03/08 07	7:28
Rep #	Base Analysis Type	ppm	μg	Adjus (Ab		NDIR (Abs)	Baseline (Abs)	Pressure (psig)	Run Time
1	TOC	2.0240	20.2400		26.22		28.98	2.76	49.51	12:25
2	TOC	1.9475	19.4752		25.66	enn av ave av av 1848/1898 v 1848/1898	28.27	2.61	49.49	12:26
3	TOC	1,8690	18.6897	······································	25.09		27.80	2.72	49.54	12:27
4	TOC	1.8515	18.5154		24.96	no con a consession a sanda establishment de describer	27.70	2.74	49.51	12:24
P	Analysis	(v1092) Sample ID	Result (711 (v3)		021711 . Dev. omC)	(VIO)	כ	Start Time	······································
♦ 1	Type 8 TOC	K1801917-001.13	ms 27.80	32 ppm		0000 ppm	0.000	0% 20	018/03/08 08	3:31
Rep #	Base Analysis Type	ppm	ra 	Adjus (Ab		NDIR (A	Abs)	Baseline (Abs)	Pressure (psig)	Run Time
1	TOC	27.8032	278.0323		213.96		216.75	2.79	49.50	12:34
	<u>Dilution</u> 1:10	Blank Contribu (TC) 11.4746 ((v1092)	(IC) Extend	<u>ethod</u> ed Reacti 711 (v3)	on i	Calibra Extended 021711	Reactio	on		
P	os Analysis Type	Sample ID	Result (p	pmC)	Std. (ppi	Dev. mC)	RSE)	Start Time	•
1	9 TOC	RB	0.574	17 ppm	0.1	258 ppm	21.900	0% 20)18/03/08 08	3:48
Rep #	Base Analysis Type	ppm	μg	Adjus (Ab		NDIR (Abs)	Baseline (Abs)	Pressure (psig)	Run Time
1	TOC	0.6637	6.6367		16.31	Spy day ye ago what is a death of death in the sech contra	18.98	2.67	49.48	12:24
2	тос	0.4857	4.8572	a i kalijanijana (anganijan (anganijan angani	15.01		17.78	2.76	49.52	12:28
	<u>Dilution</u> 1:10	Blank Contribu (TC) 11.4746 ((v1092)	(IC) Extend	<u>ethod</u> ed React 711 (v3)	ion I	Calibra Extended 021711	Reactio	n		

	Pos	ВАТ	Concentration (ppm)	Dil	Sample ID	Min / Max (% dev)	Result	Std. Dev.	RSD	Start Time
•	В	TOC	25.0000			0 / infinity	26.0629	0.0000	0%	2018/03/08 09:19
				refrance from	021711 [25 ppm]	(NA/NA)	ppm	ppm		
						7	(PASS)			
		ļ			nun maasas lään, kammuun minimin misalalalalahen minimin laminin känönin.		(PASS)	e v v v v v v v v v v v v v v v v v v v		

Pos	Base Analysis Type	ID	Rep #	ppm	μg	Adjusted	NDIR	Baseline	Pressure	Run Time
В	TOC	25 ppm	1	26.0629	260.6288	202.10	204.73	2.63	49.52	12:29

Completion State
Success - Criteria
met.

Success Action
Do Nothing

Method Extended Reaction 021711 (v3) Calibration Extended Reaction 021711 (v16) STD Conc - Pos B 50 ppmC

Sample	Type	Chack	Standard>	CCR 02171:	1
Jailipic	IVDC.	CHECK	Jiailuaiu	UUD UZ II I	1

From Schedule Version 1

5. A		Pos	BAT	Concentration (ppm)	Dil	Sample ID	Min / Max (% dev)	Result	Std. Dev.	RSD	Start Time
Ţ	•	D	TOC	0.0000	1:2	[TOC] CCB	0 / infinity	0.5070	0.0000	0%	2018/03/08 09:36
						021711 [0.0 ppm]	(NA/NA)	ppm	ppm		
								(PASS)			

Pos	Base Analysis Type	ID	Rep #	ppm	μg	Adjusted	NDIR	Baseline	Pressure	Run Time	
D	TOC	0.0 ppm	1	0.5070	5.0705	15.98	18.60	2.62	49.51	12:32	

Completion State
Success - Criteria
met.

Success Action
Do Nothing

Method Extended Reaction 021711 (v3) Calibration Extended Reaction 021711 (v16)

STD Conc - Pos D 0 ppmC

Sample Type: Sample

From Schedule Version 1

	Pos	Analysis Type	Sample ID	Result (ppmC)	Std. Dev. (ppmC)	RSD	Start Time
•	20	TOC	MB2	0.5147 ppm	0.0000 ppm	0.0000%	2018/03/08 09:52

Rep #	Base Analysis Type	ppm	hā	Adjusted (Abs)	NDIR (Abs)	Baseline (Abs)	Pressure (psig)	Run Time
1	TOC	0.5147	5.1469	15.22	17.89	2.66	49.51	12:34

Dilution 1:10 Blank Contribution (TC) 11.4746 (IC) (v1092) Method Extended Reaction 021711 (v3) Calibration Extended Reaction 021711 (v16)

Sample Type: Check Standard --> LCS ER

and the second s	Pos	BAT	Concentration (ppm)	Dil	Sample ID	Min / Max (% dev)	Result	Std. Dev.	RSD	Start Time
•	2	TOC	24.0000	1:1	[TOC] LCS ER	0 / infinity	24.7811	0.0000	0%	2018/03/08 10:09
					[24.0 ppm]	(NA/NA)	ppm (PASS)	ppm		
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	ilionosta orationa e attaca e const	na e e e e e e e e e e e e e e e e e e e	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			(CCAT)	nadanakan animana da kada da Manta ata bamin da an		and the state of t

Pos	Base Analysis	ID	Rep #	ppm	hа	Adjusted	NDIR	Baseline	Pressure	Run Time	
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	Туре									
2	TOC	24.0 ppr	n 1	24.7811	247.8109	192.76	195.43	2.67	49.52	12:31
Coi	mpletion S	itate S	Success A	ction	Method		Calibration	STD	onc - Po	s 2
Su	ccess - Crit met.	eria	Do Nothi	ing Ex	tended Read 021711 (v3		ended Reaction 021711 (v16)	n 2	4 ppmC	

amr	i le Type : Sample			HAVE TRANSPORTED THE STREET OF THE STREET	***************************************	**************************************		From	Schedule V	ersior/
P	os Analysis Type	Sample ID	Result (ppmC)		. Dev. omC)	RSI		Start Time	}
	1 TOC	K1801917-002.1	3 2.81	100 ppm	0.	1113 ppm	3.960	0% 20	18/03/08 10):25
Rep #	Base Analysis Type	ppm	hâ	Adjus (Ab		NDIR (A	\bs)	Baseline (Abs)	Pressure (psig)	Rur Tim
1	TOC	2.9729	29.7295		33.13		35.87	2.75	49.52	12:2
2	TOC	2.7590	27.5902	And the same of the last of th	31.57		34.35	2.78	49.54	12:2
3	TOC	2.7839	27.8387		31.75	**************************************	34.40	2.65	49.55	12:2
4	TOC	2.7243	27.2428	200 A Vario 201, man 1, may 1, man 1, may 1, man 1, may 1, man 1,	31.32		34.10	2.78	49.56	12:2
	<u>Dilution</u>	Blank Contribu	tion M	lethod		Calibra	tion	A VARIANCE AND A VARIANCE AND THE PART IN LANG	**************************************	f total vacablests access
	1:10	(TC) 11.4746 (I (v1092)	C) Extend	ed Reacti 711 (v3)	on l	Extended F 021711	Reactio	n		
Po	Analysis Type	Sample ID	Result (ppmC)		. Dev. omC)	RSE)	Start Time	deden de arenen a 1 Anon
2	2 TOC	K1801917-003.1	3 2.39	72 ppm	0.0	0819 ppm	3.420)% 201	18/03/08 11	:28
Rep #	Base Analysis Type	ppm	hâ	Adjus (Ab		NDIR (A	(bs)	Baseline (Abs)	Pressure (psig)	Rur Tim
1	TOC	2.4834	24.8344	and a second	29.56	#YPFFAVAIII de ber euer eer aanseer eers ver	32.25	2.69	49.56	12:2
2	TOC	2.4254	24.2535	***************************************	29.14	Managari Managari y Pangaring ang managaring ang managaring ang managaring ang managaring ang managaring ang m	31.74	2.60	49.59	12:2
3	TOC	2.3920	23.9199		28.90	The State of Archaells decommonded Ages you group up a	31.52	2.62	49.58	12:2
4	тос	2.2882	22.8818		28.14		31.01	2.87	49.57	12:2
	Dilution	Blank Contribut	ion M	ethod		Calibra	fion			
	1:10	(TC) 11.4746 (I (v1092)	C) Extende	ed Reaction 711 (v3)	on E	Extended F 021711	eactio	n		
Po	Type	Sample ID	Result (ppmC)		Dev. mC)	RSE		Start Time	**********
2	3 TOC	K1801917-004.13	3 2.05	16 ppm	0.0)355 ppm	1.7300)% 201	8/03/08 12	:31
Rep #	Base Analysis Type	ppm	hā	Adjus (Abs		NDIR (A	bs)	Baseline (Abs)	Pressure (psig)	Run Time
1	TOC	2.0627	20.6272		26.50		29.29	2.79	49.59	12:2:
2	TOC	2.0019	20.0189		26.05		28.78	2.73	49.57	12:26
3	TOC	2.0856	20.8565		26.66		29.41	2.75	49.62	12:2
4	TOC	2.0563	20.5626		26.45	**************************************	29.21	2.76	49.60	12:26
	<u>Dilution</u> 1:10	Blank Contribut (TC) 11.4746 (I	C) Extende	<u>ethod</u> ed Reactio	on E	<u>Calibra</u> Extended R	eactio	1		
		(v1092)	021	711 (v3)		021711 (V16)			

D		n voran voran der er en en en er en en er en	**************************************	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~).0295 ppm			18/03/08 13	
Rep #	Base Analysis Type	ppm	hã	Adjusted (Abs)	NDIR (A	.bs)	(Abs)	Pressure (psig)	Run Time
1	TOC	1.2827	12.8266	20.82	2	23.69	2.87	49.66	12:2
2	TOC	1.2523	12.5232	20.60	0	23.35	2.75	49.63	12:2
3	TOC	1.2117	12.1167	20.30)	23.10	2.80	49.65	12:2
4	тос	1.2589	12.5891	20.64	4	23.37	2.73	49.63	12:2
	<u>Dilution</u>	Blank Contribut	ion <u>M</u>	lethod	Calibra	tion			
	1:10	(TC) 11.4746 (IC (v1092)		ed Reaction 711 (v3)	Extended F 021711		n		
Ро	s Analysis Type	Sample ID	Result (nnmill	d. Dev. opmC)	RSE)	Start Time	47479-9-1740-7-240
25	TOC	K1801917-006.13	1.87	⁷ 65 ppm (0.0480 ppm	2.5600	0% 20	18/03/08 14	:37
Rep #	Base Analysis Type	ppm	þд	Adjusted (Abs)	NDIR (A	vps)	Baseline (Abs)	Pressure (psig)	Run Time
1	TOC	1.9151	19.1511	25.42	2	28.07	2.64	49.63	12:26
2	TOC	1.8180	18.1803	24.72	2	27.69	2.98	49.63	12:26
3	TOC	1.9163	19.1635	25.43	3	28.18	2.75	49.62	12:2
4	TOC	1.8565	18.5648	24.99	9	27.71	2,71	49.65	12:2:
	Dilution	Blank Contribut	ion M	lethod	Calibra	tion			
	1:10	(TC) 11.4746 (R (v1092)		ed Reaction 711 (v3)	Extended F 021711		n		
Po	s Analysis Type	Sample ID	Result (nnmil	d. Dev. opmC)	RSE) Alliani	Start Time	
26	TOC	K1801917-007.13	1.95	501 ppm ().0477 ppm	2.440(0% 20	18/03/08 15	5:39
Rep #	Base Analysis Type	ppm	hā	Adjusted (Abs)	NDIR (A	(bs)	Baseline (Abs)	Pressure (psig)	Run Time
1	TOC	1.9902	19.9022	25.9	7	28.68	2.71	49.61	12:26
2	TOC	1.9718	19.7182	25.84	4	28.56	2.72	49.61	12:20
3	TOC	1.9566	19.5658	25.72	2	28.42	2.70	49.63	12:2
4	TOC	1.8816	18.8161	25.18	3	28.02	2.84	49.66	12:2
	Dilution	Blank Contribut	ion <u>M</u>	lethod	<u>Calibra</u>	tion			
	1:10	(TC) 11.4746 (II (v1092)		ed Reaction 711 (v3)	Extended F 021711		in		
Ро	s Analysis Type	Sample ID	Result (nnmili	d. Dev. opmC)	RSI)	Start Time	
27	TOC	RB	0.49	947 ppm (0.0384 ppm	7.7500	0% 20	18/03/08 16	3:42
Rep #	Base Analysis Type	ppm	hā	Adjusted (Abs)	NDIR (A	(bs)	Baseline (Abs)	Pressure (psig)	Run Time
1	TOC	0.4676	4.6759	14.88	8 }	17.70	2.82	49.64	12:26
2	TOC	0.5218	5.2183	15.2	8	18.10	2.82	49.67	12:2:
	<u>Dilution</u>	Blank Contribut	ion M	lethod	Calibra	tion			
	1:10	(TC) 11.4746 (II (v1092)	C) Extend	led Reaction 1711 (v3)	Extended F 021711	Reactic	n		
Po	s Analysis Type	Sample ID	Result (d. Dev. opmC)	RSE		Start Time	

	8 TOC	K1802038-001.02	5.25	576 ppm 0.0	0.530 ppm	0% 20	18/03/08 17	':14
Rep #	Base Analysis Type	ppm	μg	Adjusted (Abs)	NDIR (Abs)	Baseline (Abs)	Pressure (psig)	Run Time
1	TOC	5.2773	52.7728	49.91	52.65	2.75	49.65	12:28
2	TOC	5.2380	52.3801	49.62	52.61	2.98	49.64	12:21
	Dilution	Blank Contribution	<u>M</u>	ethod	Calibration	**************************************	rana 194 mmora 1 ipa indije djezgleja ili 1 ipa mestoja i 5	- Law Wildelie Libertery Aware

1:10	(TC) 11.4746 (IC) (v1092)	Extended Reaction 021711 (v3)	Extended Reaction 021711 (v16)

·VIIII	Pos	BAT	Concentration (ppm)	Dil	Sample ID	Min / (% d		Result	Std. Dev	r. RSD	Start Ti	ime
•	В	TOC	25.0000		[TOC] CCV 021711 [25 ppr	0 / inf n] (NA /	,	25,755 ppi (PAS:	n pp		2018/03/08	3 17:46
P	os A	Base Inalysis	i ID	Rep #	ppm	hâ	Adj	usted	NDIR .	Baseline	Pressure	Run Time
	В	TOC	25 ppm	1	25.7552	257.5517	Bridge Carnellon of And Sedenic on	199.86	202.54	2.68	49.62	12:32
	Com	pletion	State Succ	cess /	Action	Method		Ca	alibration	STE	Conc - Po	s B
	Succ	cess - C met.	riteria Do	o Noth	3	ended Re 021711 (v			ded Reaction 1711 (v16)		50 ppmC	

aı	<u>nple</u>	Type:	Check Standard -	> C	CB	3 021711					Fre	om S	Schedule Ve	ersion
	Pos	BAT	Concentration (ppm)	Dil	and the same of the same	Sample ID	Min / (% d		Result	Std. De	v. RS	D	Start Ti	me
•	D	TOC	0.0000	1:2		[TOC] CCB 21711 [0.0 ppm	0 / inf] (NA /		0.49° PP (PAS	m p)00 (pm)%	2018/03/08	18:02
Po	os A	Base nalysis Type	in ID	Re		ppm	μg	Adj	usted	NDIR	Basel	ine	Pressure	Run Time
)	TOC	0.0 ppm	1		0.4978	4.9785		15.91	18.74	2	.82	49.60	12:33

is an entre contract on processing and the contract of the con	erane ranno en la comunicación de la comunicación d	angangang nagangang naganal binang nagang nagangan panangang nagan bang Amaran ana manang bananang banang pang Pangangang nagang naganal binang nagang nagangan panangang nagan bang pangangan nagan panangan banangan banang	Conservation of the contract o	en e
Completion State	Success Action	<u>Method</u>	<u>Calibration</u>	STD Conc - Pos D
Success - Criteria met.	Do Nothing	Extended Reaction 021711 (v3)	Extended Reaction 021711 (v16)	0 ppmC

Sampl	<u>e Type</u> : Sample)						From	Schedule V	ersion
Po	Analysis Type	Sample ID	Result (p	opmC)		. Dev. omC)	RSD		Start Time	ene enemente y deser este estituer
29	тос	K1802038-001.02 n	ns 31.09	18 ppm	0.0	0000 ppm	0.0000	1% 20°	18/03/08 18	:19
Rep #	Base Analysis Type	ppm	μg	Adjust (Abs		NDIR (A	Abs)	Baseline (Abs)	Pressure (psig)	Run Time
1	TOC	31.0918	310.9180	2	37.91	2	240.71	2.80	49.60	12:30

		1:10	(TC) 11.4746 (v1092)	• •	ded Reac 1711 (v3)		Extended 02171		n		
	Pos	Analysis Type	Sample ID	Result (ppmC)		Dev. mC)	RSD	de de desente una constante de la constante de	Start Time	
•	30	TOC	RB	0.59	162 ppm	0.1	170 ppm	19.6200	0% 20	18/03/08 18	3:35
Re		Base Analysis Type	ppm	hâ	Adju (Al	sted os)	NDIR ((Abs)	Baseline (Abs)	Pressure (psig)	Run Time
1		TOC	0.6789	6.7891		16.42	TOWN WE VIRE THE PROPERTY AND ARREST AND	19.31	2.89	49.63	12:29
2	2	TOC	0.5135	5.1345		15.21		18.17	2.96	49.61	12:26
		<u>Dilution</u> 1:10	Blank Contrib (TC) 11.4746 (v1092)	(IC) Extend	<u>/lethod</u> ded Reac 1711 (v3)		Calibi Extended 02171	Reactio	n		
	Pos	Analysis Type	Sample ID	Result (ppmC)	Std. (ppi		RSD		Start Time	
•	31	TOC	FB 3/5/18	0.57	'66 ppm	0.0	600 ppm	10.4100	0% 20	18/03/08 19):07
Re #		Base Analysis Type	ppm	μg	Adju (Al	sted os)	NDIR (Abs)	Baseline (Abs)	Pressure (psig)	Run Time
1		TOC	0.6190	6.1904		15.98		18.80	2.82	49.58	12:24
2	2	TOC	0.5342	5.3419		15.36		18.11	2.75	49.59	12:22
	Pos	Analysis Type	(TC) 11.4746 (v1092) Sample ID		1711 (v3) (ppmC)	Std.	021711 . Dev. omC)	l (v16) RSC	A pro-	Start Time	g m m g s m _a g m g s m g T n _a g m n g
*	32	TOC	K1802006-001 do	oc 4x 15.5	975 ppm		1827 ppm	1.1700)% 20	18/03/08 19	:39
Re #		Base analysis Type	ppm	hā	Adju (Al		NDIR (Abs)	Baseline (Abs)	Pressure (psig)	Run Time
1		TOC	15.4683	154.6828		124.13		126.72	2.59	49.59	12:24
2	2	TOC	15.7267	157.2669		126.01	alaladd Areasanlaw forestaw forallamen	128.70	2.69	49.50	12:25
	***************************************	Dilution 1:10	Blank Contrib (TC) 11.4746 (v1092)	(IC) Extend	<u>/lethod</u> led Reac 1711 (v3)		Calibr Extended 021711	Reaction	n		ament established best best discharge
San	nple	Type: Sample				#*************************************			From	Schedule V	ersion
********	Pos	Analysis Type	Sample ID	Result (Std. (ppr	nC)	RSD	menne minutenens en en en en en	Start Time	
•	33	TOC	RB	1.04	89 ppm	0.21	178 ppm	20.7600	0% 20	18/03/08 20	:11
Re #		Base Inalysis Type	ppm	μg	Adju (Al		NDIR (Abs)	Baseline (Abs)	Pressure (psig)	Run Time
		TOC	1.2029	12.0288	1	20.24		22.66	2.42	49.42	12:25

5		100	1.2023	12.0200	ZU.Z 4	22.00	2.42	49.42	12.20
) (2	TOC	0.8949	8.9490	17.99	20.48	2.49	49.47	12:28
		<u>Dilution</u> 1:10	Blank Contribution (TC) 11.4746 (IC) (v1092)	Extended	thod I Reaction 11 (v3)	<u>Calibration</u> Extended Reaction 021711 (v16)		over and more and an analysis of the state o	VA ABLE I II G G G G Allahara gaza (
0.00.00.00.00		Analysis		omenica antenigronou grippiga a stanin-ag e ag tipig gad tipig	Sto	I. Dev.	intend of a state of an above the design of the design of the second	the second the content of the second contract	**************************************

Po	s Type	Sample ID	Result (p	opmC) (ppmC)	RSI	ס	Start Time	
	4 TOC	K1802006-002 doc	2.11	43 ppm (0.1566 ppm	7.410	0% 20	18/03/08 20	:42
Rep #	Base Analysis Type	ppm	µg	Adjusted (Abs)	NDIR (A	Abs)	Baseline (Abs)	Pressure (psig)	Run Time
1	TOC	2.2250	22.2502	27.6	8	30.15	2.47	49.55	12:30
2	тос	2.0035	20.0354	26.0	7	28.84	2.78	49.59	12:26
***************************************	Dilution	Blank Contribution	M	ethod	Calibra	ation			

DilutionBlank ContributionMethodCalibration1:10(TC) 11.4746 (IC)
(v1092)Extended Reaction
021711 (v3)Extended Reaction
021711 (v16)

	Pos	Analysis Type	Sample ID	Result (ppmC)	Std. Dev. (ppmC)	RSD	Start Time
•	35	TOC	K1802006-002 ms doc	27.7226 ppm	0.0000 ppm	0.0000%	2018/03/08 21:14

 Rep #	Base Analysis Type	ppm	μg	Adjusted (Abs)	NDIR (Abs)	Baseline (Abs)	(psig)	Run Time	
 1	тос	27.7226	277.2263	213.37	216.01	2.64	49.61	12:31	

DilutionBlank ContributionMethodCalibration1:10(TC) 11.4746 (IC)Extended ReactionExtended Reaction(v1092)021711 (v3)021711 (v16)

	Pos	Analysis Type	Sample ID	Result (ppmC)	Std. Dev. (ppmC)	RSD	Start Time
4	→ 36	TOC	K1801267-008.10 doc	5.9968 ppm	0.1009 ppm	1.6800%	2018/03/08 21:30

Rep #	Base Analysis Type	ppm	μg	Adjusted (Abs)	NDIR (Abs)	Baseline (Abs)	Pressure (psig)	Run Time
1	TOC	5.9820	59.8195	55.04	57.88	2.84	49.60	12:24
2	TOC	5.8600	58.6002	54.15	57.04	2.88	49.67	12:27
3	тос	6.0814	60.8137	55.76	58.54	2.78	49.63	12:24
4	TOC	6.0638	60.6379	55.64	58.58	2.94	49.61	12:26

DilutionBlank ContributionMethodCalibration1:10(TC) 11.4746 (IC)
(v1092)Extended Reaction
021711 (v3)Extended Reaction
021711 (v16)

Sample Type: Sample From Schedule Version 5

1	Pos	Analysis Type	Sample ID	Result (ppmC)	Std. Dev. (ppmC)	RSD	Start Time
•	37	TOC	K1801267-017.04 doc	8.2933 ppm	0.1552 ppm	1.8700%	2018/03/08 22:33

Rep #	Base Analysis Type	ppm	μg	Adjusted (Abs)	NDIR (Abs)	Baseline (Abs)	Pressure (psig)	Run Time
1	TOC	8.3673	83.6730	72.41	75.18	2.77	49.57	12:26
2	TOC	8.3959	83.9586	72.62	75.48	2.86	49.57	12:26
3	TOC	8.3477	83.4766	72.27	75.23	2.96	49.62	12:27
4	TOC	8.0623	80.6233	70.19	73.18	2.99	49.59	12:23

DilutionBlank ContributionMethodCalibration1:10(TC) 11.4746 (IC)Extended ReactionExtended Reaction(v1092)021711 (v3)021711 (v16)

Sample Type: Sample

From Schedule Version 6

	Pos	Analysis Type	Sample ID	Result (ppmC)	Std. Dev. (ppmC)	RSD	Start Time
•	38	TOC	RB	1.5569 ppm	0.3613 ppm	23.2000%	2018/03/08 23:36

 Rep #	Base Analysis Type	ppm	μg	Adjusted (Abs)	NDIR (Abs)	Baseline (Abs)	Pressure (psig)	Run Time
1	TOC	1.8124	18.1240	24.67	27.40	2.72	49.58	12:25
2	TOC	1.3015	13.0147	20.95	23.84	2.89	49.57	12:26

Dilution 1:10 Blank Contribution (TC) 11.4746 (IC) (v1092) Method Extended Reaction 021711 (v3)

Calibration Extended Reaction 021711 (v16)

Sample Type: Check Standard --> CCV 021711

From Schedule Version 6

74.00.00.00.00.00.00.00.00.00.00.00.00.00	Pos	BAT	Concentration (ppm)	Dil	Sample ID	Min / Max (% dev)	Result	Std. Dev.	RSD	Start Time
•	В	TOC	25.0000	1:2	[TOC] CCV	0 / infinity	26.1031	0.0000	0%	2018/03/09 00:08
					021711 [25 ppm]	(NA/NA)	ppm	ppm		
Ì							(PASS)			

Pos	Base Analysis Type	ID	Rep #	ppm	μg	Adjusted	NDIR	Baseline	Pressure	Run Time	
В	TOC	25 ppm	1	26.1031	261.0311	202.39	205.22	2.83	49.63	12:27	

Completion State
Success - Criteria
met.

Success Action
Do Nothing

Method Extended Reaction 021711 (v3) <u>Calibration</u> Extended Reaction 021711 (v16) STD Conc - Pos B 50 ppmC

Sample Type: Check Standard --> CCB 021711

From Schedule Version 6

American Service Constitution	Pos	BAT	Concentration (ppm)	Dil	Sample ID	Min / Max (% dev)	Result	Std. Dev.	RSD	Start Time
•	D	TOC	0.0000	1:2	[TOC] CCB	0 / infinity	0.7491	0.0000	0%	2018/03/09 00:24
Į					021711 [0.0 ppm]	(NA/NA)	ppm	ppm		
	· · · · · · · · · · · · · · · · · · ·			· ·			(PASS)			

Į	os	Base Analysis Type	ID	Rep #	ppm	þg	Adjusted	NDIR	Baseline	Pressure	Run Time	
2	D	TOC	0.0 ppm	1	0.7491	7.4913	17,74	20.49	2.75	49.59	12:29	

Completion State
Success - Criteria
met.

Success Action
Do Nothing

Method Extended Reaction 021711 (v3) <u>Calibration</u>
Extended Reaction
021711 (v16)

STD Conc - Pos D 0 ppmC

Sample Type: Sample

The state of the s	Pos	Analysis Type	Sample ID	Result (ppmC)	Std. Dev. (ppmC)	RSD	Start Time
*	39	TOC	K1801267-017.04 ms doc	22.9106 ppm	0.0000 ppm	0.0000%	2018/03/09 00:40

Re	ep ≠ A	Base nalysis Type	ppm	μg	Adjust (Abs	5	NDIR (Abs)	Baseline (Abs)	Pressure (psig)	Run Time
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		TOC	22.9106	229.1061	1	78.33		181.05	2.72	49.59	12:33
	į	<u>Dilution</u>	Blank Contribu	tion M	ethod		Calibi	ation			
		1:10	(TC) 11.4746 ((v1092)	,	ed Reactio 711 (v3)	on E	Extended 02171		n		
	Pos	Analysis Type	Sample ID	Result (p	opmC)	Std. (ppr		RSD	Primary and the second	Start Time)
•	40	TOC	RB	0.958	39 ppm	0.3	365 ppm	35.100	0% 20	18/03/09 00):57
Re	ep # A	Base nalysis Type	ppm	hā	Adjust (Abs		NDIR (Abs)	Baseline (Abs)	Pressure (psig)	Run Time
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		TOC	1.1968	11.9684		20.19	TO AND THE STREET OF THE STREE	22.84	2.64	49.60	12:27
2	2	тос	0.7209	7.2093		16.72		19.44	2.72	49.58	12:24
	1	Dilution	Blank Contribu	tion M	ethod		Calibi	ation			
	-	1:10	(TC) 11.4746 ((v1092)		ed Reactio 711 (v3)	n E	Extended 02171		n		

os BAT	Concentration (ppm)	Dil	Sample ID	Min / M (% de		Result	Std. De	v. RSD	Start Ti	me
В ТОС	25.0000	1:2	[TOC] CCV 021711 [25 ppi	ţ.		pp	m p		2018/03/09	01:29
Base Analysi: Type	s ID	Rej #	p ppm	hâ	Adj	usted	NDIR	Baseline	Pressure	Run Time
TOC	25 ppm	1	25.8002	258.0021		200.18	202.77	2.59	49.58	12:29
mpletion			······			_				<u>s B</u>
)	Base Analysis Type TOC mpletion	Base Analysis ID Type TOC 25 ppm mpletion State Succ	Base Analysis Type TOC 25 ppm 1 mpletion State Success	D Rep ppm	Base Analysis Type ID Rep # ppm μg TOC 25 ppm 1 25.8002 258.0021 mpletion State Success Action Method		D21711 [25 ppm]		D Ppm Ppm	D D D D D D D D D D

a	mple	<u>Type</u> : (Check Standard -	> C(CB 021711	nomes suggested a considerable for the local cold	dan bekendirik da ekanisin bejer	Silve transferilist (Silve Silve Sil	5444545; n/sstandssedsseds 61654511145555	From	Schedule V	ersion
	Pos	BAT	Concentration (ppm)	Dil	Sample ID	Min / (% d		Result	Std. Dev	. RSD	Start Ti	me
•	D	TOC	0.0000		[TOC] CCB 021711 [0.0 ppm	0 / inf n] (NA /		0.708 ppi (PAS	m pp		2018/03/09	01:45
P	os A	Base Analysis Type	ID	Re _l	p ppm	µg	Adj	usted	NDIR	Baseline	Pressure	Run Time
1	D	TOC	0.0 ppm	1	0.7083	7.0835	**************************************	17.44	20.08	2.63	49.55	12:29
	Com	pletion	State Succ	cess	Action	Method	<u>1</u>	C	alibration	STD	Conc - Po	s D
	Succ	cess - C	riteria D	o Not	hina Exte	ended Re	action	Exten	ided Reactio	n	0 ppmC	

Meta Data Used in this Report

Blanks

Version	Reagent (Abs)	Acid (Abs)	DI IC (Abs)	DI TC (Abs)	DI TOC (Abs)	Save Time	Operator
v1091	1.7313	1.2820	0.0000	0.0000	0.0000	2018/03/07 20:39	Fusion1 (Fusion1)
v1092	2.0850	1.7200	0.0000	0.0000	0.0000	2018/03/07 23:41	Fusion1 (Fusion1)

Calibrations

Name: Extended Reaction 021711 (TOC)

Version:

v16

Calibration curve

TOC: y = 7.283x + 12.286

formula:

Ver Creation:

2017/07/24 23:31

r² value:

TOC: $r^2 = 0.99991$

Comment:

Operator:

Fusion1 (Fusion1)

Basic Analysis

TOC

Туре

Basic Analysis Type: TOC

Sample ID	Y Raw Value	X Expected	Message	End Time
0.0 ppm	12.1780	0.0000		2017/07/24 21:53
0.50 ppm	15.5530	0.5000		2017/07/24 22:09
1.00 ppm	18.9640	1.0000		2017/07/24 22:25
5.00 ppm	49.8650	5.0000		2017/07/24 22:41
10.0 ppm	83.7530	10.0000	3	2017/07/24 22:58
25.0 ppm	196.5820	25.0000		2017/07/24 23:13
50.0 ppm	375.4850	50.0000		2017/07/24 23:29

Methods

Name: Extended Reaction 021711 (TOC)

Version:

٧3

Operator:

Gen Chem Lab (Fusion1)

Ver Creation:

Comment:

Parameter	Value	
SampleVolume	10.0 mL	Need
Dilution	1:10	VialF
AcidVolume	0.5 ml	ICSa
ReagentVolume	2.0 ml	lCSp
UVReactorPrerinse	Off	Base
UVReactorPrerinseVolume	5,0	Dete
NumberOfUVReactorPrerinses	1	Syrin
ICSpargeTime	1.00 mins	Syrin

2013/02/04 11:44

Advanced Parameter	Value
NeedleRinseVolume	5.0 ml
VialPrimeVolume	2.0 ml
ICSamplePrimeVolume	2.0 ml
ICSpargeRinseVolume	12.0 ml
BaselineStabilizeTime	0.70 min
DetectorPressureFlow	150 ml/min
SyringeSpeedWaste	10
SyringeSpeedAcid	7

DetectorSweepFlow	500 ml/min	SyringeSpeedReagent	7
PreSpargeTime	4.00 mins	SyringeSpeedDIWater	7
SystemFlow	500 ml/min	NDIRPressurization	60 psig
\$	от до Лебони в населения в Ления да одоб долог в очене до чене доване и в винося и на полог и постой одоб дост	SyringeSpeedSampleDispense	5
		SyringeSpeedSampleAspirate	4
		SyringeSpeedUVDispense	7
		SyringeSpeedUVAspirate	5
		SyringeSpeedICDispense	7
		SyringeSpeedICAspirate	5
		NDIRPressureStabilize	1.75 min
		SampleMixing	Off
		SampleMixingCycles	1
		SampleMixingVolume	10.0
		LowLevelFilterNDIR	Off

Acceptance / Approval

Electronic Sig				130 (M. 1867 a. 1864 behaland katala ke kalanca sa sasarah kasalan 1 kalisar sasahala kalanca sa sa sasara sa
Report Version	User Name	Acceptance	Reason	Date
	никова до применения выполняем в применения в применения в применения в применения в применения в применения в			
to ay Linea	ere en			androme, we has help we have got and form the gradual majors of the manus, where the s
		Report H	istory	

Report History

1				
Report Version	user name	System Reason	User Reason	Date
1	Fusion1 (Fusion1)	Schedule completed	Schedule completed	2018/03/09 02:03

Fusion Report - 03072018 Wednesday, March 07, 2018 06:04 PM

(View - Reps, Unused Reps, Meta-Data, Signature, History) Printed on 2018/03/12 14:45 -Monday

Report Summary Information

Company Location:

Gen Chem Lab

Schedule Name:

03072018

Engine

1.1.5.1

Instrument Name:

Fusion1

Version: Firmware

1.2.0696

Report Version:

1 of 1

Version:

Connection: RS232 COM1

Report Creation by Operators (schedule

Fusion1 (Fusion1) (v2) Fusion1 (Fusion1) (v3) Fusion1 (Fusion1) (v4)

version):

Comment:

Report Results

<u>Sa</u>	Pos Analysis Type Sample ID		From Schedule Vo			
34,440	Pos	•	Sample ID		Start Time	
•	(clean)		Clean		2018/03/07 18:04	

Rep #	Base Analysis Type	Adjusted (Abs)	NDIR (Abs)	Baseline (Abs)	Pressure (psig)	Run Time
1	IC Clean	13.00	17.22	4.22	47.56	07:59
2	TC Clean	6.30	8.87	2.57	49.54	07:15
3	TC Clean	2.21	5.04	2.83	49.50	06:58
4	TC Clean	1.74	4,52	2.78	49.54	07:01

Samp	le Type: Cl	ean			From	Schedule Versi
		nalysis Type	Sample ID	Start	Time	
(c	• (clean) Clean 2018/03/07 1					/07 18:39
Rep #	Base Analysis Type	Adjusted (Abs)	NDIR (Abs)	Baseline (Abs)	Pressure (psig)	Run Time
1	IC Clean	13.55	16.14	2.59	46.88	07:57
2	TC Clean	4.11	6.77	2.66	49.55	07:17
3	TC Clean	2.04	4.82	2.78	49.56	07:01
4	TC Clean	1.51	4.23	2.72	49.51	07:03

	Pos At	nalysis Type	Sample IE	Start	Time			
•	(clean)	**************************************	Clean		2018/03/	2018/03/07 19:13		
Re #	Base Analysis Type	Adjusted (Abs)	NDIR (Abs)	Baseline (Abs)	Pressure (psig)	Run Time		
1	IC Clean	0.79	3.37	2.58	46.76	07:59		
2	TC Clean	3.71	6.30	2.59	49.59	07:17		
3	TC Clean	1.71	4.42	2.72	49.53	07:01		
4	TC Clean	1.64	4.34	2.70	49.57	07:02		

	۸.			·		P1P*PP1.*.1*111
		nalysis Type	Sample II		Start	Time
• (t	olank)		Reagent/Acid I	3/07 19:47		
Rep #	Base Analysis Type	Adjusted (Abs)	NDIR (Abs)	Baseline (Abs)	Pressure (psig)	Run Time
1	IC Clean	0.64	3.27	2.64	46.67	07:58
			2000 1000 2000 1000 2000 1000 1000 1000	**************************************	Market A. A. E. Co. A. A. Co. Section of the Section of the Control of the Contro	
2	TC Clean	3.84	6.51	2.68	49.53	07:15
3	TC Clean	2.05	4.76	2.72	49.48	07:02
4	TC Clean	1.79	4.60	2.81	49.52	07:04
Committee and Commen	~~~~		т ^п од 14 борого поточно того поточно по	ar 20-200 kw 20-200 da dhawada kwanda ka badha ba ara ara a waxaya a a ara a a a a a a a a a a a a a a	top the tot the testing to the testing of the second or th	
5	Reagent Blank	5.19	7.77	2.58	49.52	08:11
······································	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	guiden an N. V. Fred to a N. V. actival and no versions are not account as N. V. acquire account account account				
6	Acid Blank	1.28	3.88	2.59	46.42	08:04

Samp	ole Type: Sample							From	Schedule V	ersion
Р	os Analysis Type	Sample ID	Result (p	pmC)		. Dev. omC)	RSI)	Start Time	
• [) TOC	RB	0.800	03 ppm	0.	0000 ppm	0.0000	0% 20	18/03/07 20):39
Rep #	Base Analysis Type	ppm	ha	Adjust (Abs		NDIR (A	Abs)	Baseline (Abs)	Pressure (psig)	Run Time
1	TOC	0.8003	8.0026		17.23	Unathad a ferbassia balancan consessance cons	19.90	2.67	49.60	12:33
	<u>Dilution</u>	Blank Contribution	Me	thod		Calibra	ition			
	1:10	(TC) 11.4039 (IC) (v1091)		d Reactio	n	Extended F		n		

Sample Type: Check Standard --> CCV 021711

1	Pos	BAT	Concentration (ppm)	Dil	Sample ID	Min / Max (% dev)	Result	Std. Dev.	RSD	Start Time
•	В	TOC	25.0000	1:2	[]	0 / infinity	25.9985	0.000		2018/03/07 20:55
					021711 [25 ppm]	(NA/NA)	(PASS)	ppm		

and the property of the second commercial	Pos	Base Analysis Type	lD	Rep #	ppm	μg	Adjusted	NDIR	Baseline	Pressure	Run Time	
	В	TOC	25 ppm	1	25.9985	259.9848	201.63	204.29	2.66	49.59	12:33	

Completion State
Success - Criteria
met.

Success Action
Do Nothing

Method Extended Reaction 021711 (v3) Calibration Extended Reaction 021711 (v16) STD Conc - Pos B 50 ppmC

Sample Type: Check Standard --> CCB 021711

From Schedule Version 4

2	Pos	BAT	Concentration (ppm)	Dil	Sample ID	Min / Max (% dev)	Result	Std. Dev.	RSD	Start Time
•	D	TOC	0.0000	1:2	[TOC] CCB	0 / infinity	0.3914	0.0000	0%	2018/03/07 21:12
					021711 [0.0 ppm]	(NA/NA)	ppm	ppm		
							(PASS)			

Pos	Base Analysis Type	ID	Rep #	ppm	þg	Adjusted	NDIR	Baseline	Pressure	Run Time	The second secon
D	TOC	0.0 ppm	1	0.3914	3.9143	15.14	17.97	2.84	49.58	12:34	

Completion State
Success - Criteria
met.

Success Action
Do Nothing

Method Extended Reaction 021711 (v3) <u>Calibration</u> Extended Reaction 021711 (v16) STD Conc - Pos D 0 ppmC

S	ample ⁻	Type : Sampl	е				From Schedule Version 4
	Pos	Analysis Type	Sample ID	Result (ppmC)	Std. Dev. (ppmC)	RSD	Start Time
•	1	TOC	MB1	0.4141 ppm	0.0000 ppm	0.0000%	2018/03/07 21:29
18440							

SALES APLEON	Rep #	Base Analysis Type	ppm	hâ	Adjusted (Abs)	NDIR (Abs)	Baseline (Abs)	Pressure (psig)	Run Time
The second	1	TOC	0.4141	4.1414	14.42	17.20	2.78	49.57	12:34

Dilution 1:10 Blank Contribution (TC) 11.4039 (IC) (v1091) Method Extended Reaction 021711 (v3) Calibration Extended Reaction 021711 (v16)

Sample Type: Check Standard --> LCS ER

	Pos	BAT	Concentration (ppm)	Dil	Sample ID	Min / Max (% dev)	Result	Std. Dev.	RSD	Start Time
*	2	TOC	24.0000	1:1	[TOC] LCS ER		51.1134	0,0000	0%	2018/03/07 21:45
	and the complete parts from the con-		28-4, y 2022/11/12/70/11/12/10/4/10/4/10/4/10/4/10/4/10/4/10		[24.0 ppm]	(NA/NA)	ppm (FAIL)	ppm		

Pos	Base Analysis	ID	Rep #	ppm	μg	Adjuste	d NDIR	Baseline	Pressure	Run Time	
-----	------------------	----	----------	-----	----	---------	--------	----------	----------	-------------	--

or factor for the fine for		Туре								
	2	TOC	24.0 ppm	1	i	511.1341	387.09	2.55	49.51	12:32

Completion State
Success - Criteria
met.

Success Action
Do Nothing

Method Extended Reaction 021711 (v3) <u>Calibration</u> Extended Reaction STD Conc - Pos 2 24 ppmC

021711 (v16)

Meta Data Used in this Report

Blanks

Version	Reagent (Abs)	Acid (Abs)	DI IC (Abs)	DI TC (Abs)	DI TOC (Abs)	Save Time	Operator
v1090	1.6490	1.1890	0.0000	0.0000	0.0000	2018/03/05 20:03	Fusion1 (Fusion1)
v1091	1.7313	1.2820	0.0000	0.0000	0.0000	2018/03/07 20:39	Fusion1 (Fusion1)

Calibrations

Name: Extended Reaction 021711 (TOC)

Version:

v16

TOC

Calibration curve

TOC: y = 7.283x + 12.286

formula:

Ver Creation:

2017/07/24 23:31

r² value:

TOC: $r^2 = 0.99991$

Comment:

Operator:

Fusion1 (Fusion1)

Basic Analysis

Type

Basic Analysis Type: TOC

Sample ID	Y Raw Value	X Expected	Message	End Time
0.0 ppm	12.1780	0.0000	V (1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1	2017/07/24 21:53
0.50 ppm	15.5530	0.5000	Coulo esculuado espesado Esta espesada e constituido de contrator e especiado e esta esta forma e constituido e	2017/07/24 22:09
1.00 ppm	18.9640	1.0000	and the entertainment of providing of the special providing the special providing the special providers of the special pr	2017/07/24 22:25
5.00 ppm	49.8650	5.0000	# HAARING 1/1 1/2 1/2/1 1/2 1/2 1/2 1/2 1/2 1/2 1	2017/07/24 22:41
10.0 ppm	83.7530	10.0000	The after the control of an incident control of the	2017/07/24 22:58
25.0 ppm	196.5820	25.0000		2017/07/24 23:13
50.0 ppm	375.4850	50.0000	***************************************	2017/07/24 23:29

Methods

Name: Extended Reaction 021711 (TOC)

Version:

v3

2013/02/04 11:44

Operator:

Gen Chem Lab (Fusion1)

Ver Creation:

Comment:

Parameter	Value	Advanced Parameter	Value
SampleVolume	10.0 mL	NeedleRinseVolume	5.0 ml
Dilution	1:10	VialPrimeVolume	2.0 ml
AcidVolume	0.5 ml	ICSamplePrimeVolume	2.0 ml
ReagentVolume	2.0 ml	ICSpargeRinseVolume	12.0 ml
UVReactorPrerinse	Off	BaselineStabilizeTime	0.70 min
UVReactorPrerinseVolume	5.0	DetectorPressureFlow	150 ml/min
NumberOfUVReactorPrerinses	1	SyringeSpeedWaste	10
ICSpargeTime	1.00 mins	SyringeSpeedAcid	7
DetectorSweepFlow	500 ml/min	SyringeSpeedReagent	7
PreSpargeTime	4.00 mins	SyringeSpeedDIWater	7
SystemFlow	500 ml/min	NDIRPressurization	60 psig
		SyringeSpeedSampleDispense	5
		SyringeSpeedSampleAspirate	4
		SyringeSpeedUVDispense	7
		SyringeSpeedUVAspirate	5
		SyringeSpeedICDispense	7
		SyringeSpeedICAspirate	5
		NDIRPressureStabilize	1.75 min
		SampleMixing	Off
		SampleMixingCycles	1
		SampleMixingVolume	10.0
		LowLevelFilterNDIR	Off

Acceptance / Approval

Electronic Sig	gnatures						
Report Version	User Name	Acceptance	Reason	Date			
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Report History

Report History

Constitution of the consti	Report Version	User Name	System Reason	User Reason	Date
	1	Fusion1 (Fusion1)	Schedule completed	Schedule completed	2018/03/07 22:02